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NATIONAL BODY-BURDEN DATABASE

CHEMICALS IDENTIFIED IN HUMAN BIOLOGICAL MEDIA

1984

VOLUME VII, Part 3

Prepared by

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Washington, DC 20460

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DATABASE RECORDS

Drugs

(2R,4R)-2-(2-Hydroxyphenyl)-3-(3-mercaptopropionyl)-4-thiazolidinecarboxylic acid (No postings in CHEMLINE).

Tissue	Cases Exposure Route	Range	Mean	General Information
10018 Blood, whole	2 Ingestion	a) 1.12-0.12 ug/mL b) 0.712-0.08 ug/mL	a) Not given b) Not given	a) Subject A, 45 and 120 min, after 50 mg dose b) Subject B, 60 and 120 min, after 30 mg dose 120 min levels estimated from graph. Patients with essential hypertension, 29-45 yr, 49.8-65.6 kg, supine during study period HPLC-ED
BLOOD; DELIBERATE EXPOSURE; ADULTS; ANTIHYPERTENSIVE AGENTS; DRUGS; MEASUREMENT METHODS Shimada, K.; Tanaka, M.; Nambara, T.; Imai, Y. 1984 Journal of Pharmaceutical Sciences 73(1):119-121				

(3,4'-Bipyridin)-6(1H)-one, 5-amino-
60719-84-8
C10-H9-N3-O
MW 187.22

Tissue	Cases Exposure Route	Range	Mean	General Information
10018 Blood, plasma	14 Ingestion Injection	a) 1.89-7.34 ug.hr/ml b) 1.55-6.79 ug.hr/ml c) 0.44-1.66 g/ml	a) 4.06+/-1.58 ug.hr/ml b) 3.80+/-1.70 ug.hr/ml c) 0.95+/-0.27 g/ml	a) Area under curve, 0-24 hr after 75 mg IV b) Area under curve, 0-24 hr after 75 mg oral c) Peak 61+/-33 min after 75 mg oral. Healthy volunteers, 26.9+/-1.2 yr old, wt 77.4+/-3.4 kg, ht 180+/-1.7 cm HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DISEASES; HEART DISEASES; CARDIOVASCULAR DISEASES; ANTIARRHYTHMIC AGENTS; DRUGS; DRUG THERAPY; BIOACCUMULATION Park, G.B.; Kershner, R.P.; Angellotti, J.; Williams, R.L.; Benet, L.Z.; Edelson, J. 1983 Journal of Pharmaceutical Sciences 72(7):817-819				

Tissue	Cases Exposure Route	Range	Mean	General Information
10020 Blood, plasma	18 Ingestion	a) 0.61-1.66 ug/ml b) 0.63-3.03 ug/ml c) 0.96-4.66 ug/ml	a) 1.03+/-0.07 ug/ml b) 1.74+/-0.15 ug/ml c) 2.53+/-0.26 ug/ml	a) Peak 39+/-4 min after 75 mg b) Peak 44+/-5 min after 150 mg c) Peak 45+/-5 min after 225 mg. Healthy men HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; CARDIOVASCULAR DISEASES; ANTIARRHYTHMIC AGENTS; DRUG THERAPY; DRUGS; BIOACCUMULATION Edelson, J.; Park, G.B.; Angellotti, J.; kershner, R.P.; Ryan, J.J.; McMahon, F.G. 1983 Clinical Pharmacology and Therapeutics 34(2):190-194				

(3,4'-Bipyridine)-5-carbonitrile, 1,6-dihydro-2-methyl-6-oxo-
78415-72-2
C12-H9-N3-O

Tissue	Cases Exposure Route	Range	Mean	General Information
10021 Blood, plasma	a) 1 b) 1 c) 5 d) 5 e) 5 f) 5 g) 5 h) 5 Ingestion Injection	a) 900-5 ng/ml b) 800-8 ng/ml c) 16.7-40.9 ng/ml d) 32.0-50.5 ng/ml e) 101-141 ng/ml f) 125-184 ng/ml g) 114-281 ng/ml h) 125-334 ng/ml	a) Not given b) Not given c) 27.7+/-12.3 ng/ml d) 41.3+/-9.25 ng/ml e) 116+/-22.0 ng/ml f) 152+/-29.7 ng/ml g) 158+/-63.4 ng/ml h) 234+/-106 ng/ml	a) 0 and 2 hr after 30 ug/kg, IV b) 0 and 6 hr after 125 ug/kg, IV c) 1 mg orally d) 2.5 mg orally e) 5.0 mg orally f) 7.5 mg orally g) 10 mg orally h) 12.5 mg orally c-h) maxima at average time of 1.13+/-0.6 hr. Pharmacokinetic data given for individual cases. 18-41 yr old (mean 28.9 yr) healthy volunteers HPLC
10022 Urine	a) 10 b) 18 Ingestion Injection	a) 66.4-107% b) 67.8-110% % of dose	a) 79.9+/-10.7% b) 84.5+/-10.1% % of dose	a) 10-125 ug/kg IV b) 1.0-12.5 mg, oral Cumulative excretion for 24 hr. 18-41 yr old (mean 28.9 yr) healthy volunteers HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS Strochane, R.M.; Kose, R.P.; Biddlecome, C.E.; Luckhowec, C.; Edelson, J. 1984 Journal of Pharmaceutical Sciences 73(10):1438-1441				

Acetaldehyde
75-07-0
C2-H4-O
MW 44.06, MP -123.5 C, BP 20.8 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10023 Amniotic fluid	6 Ingestion	0-0.93 ug/ml	Not given	0-3.5 hr after 0.3 gm/kg body wt ethanol 2 hr following breakfast. Only found in 1 of the subjects. Peak 2 hr. Elective abortions, healthy 21 yr olds mean gestational age 119 d, Ontario, Canada. GLC
10024 Blood	6 Ingestation	0-1.05 ug/ml	Not given	0-3.5 hr venous blood after 0.3 gm/kg body wt ethanol 2 hr following breakfast. Mean peak 0.64+/-0.32 ug/ml from 0.25-0.75 hr. None found in 2 of the subjects. Healthy present 21 yr olds (mean) mean gestational age 119 d, elective abortions. Ontario, Canada. GLC
AMNIOTIC FLUID; BLOOD; DELIBERATE EXPOSURE; CANADA; ALCOHOLIC BEVERAGES; HEALTH HAZARDS; PREGNANCY; TRANSPLACENTAL TRANSFER; FETUS; ENVIRONMENTAL EXPOSURE; DRUGS Brien, J.F.; Loomis, C.W.; Trammer, J.; McGrath, M. 1983 American Journal of Obstetrics and Gynecology 146:181-186				

Acetaldehyde
75-07-0
C2-H4-O
MW 44.05, MP -123.5 C, BP 20.8 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10025 Blood	Ingestion	1.5-6.2 umol/l	Not given	1 hr after 0.8 g/kg ethanol. Non-alcoholics GC
BLOOD; DELIBERATE EXPOSURE; DRUGS; MEASUREMENT METHODS; ALCOHOLIC BEVERAGES Ryle, P.R.; Thomson, A.D. 1983 Lancet 2(8343):219-220				

Acetamide, 2-(p-(2-hydroxy-3-(isopropylamino)propoxy)phenyl)- (8 CI); Benseenacetamide, 4-(2-hydroxy-3-((1-methylethyl)amino)propoxy)- (9 CI)
29122-68-7
C14-H22-N2-O3
MW 266.34, MP 146-148 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10026 Blood, plasma	1 Ingestion	a) 450 ng/ml-700 ng/ml b) Not given c) Not given d) Not given	a) Not given b) 425 ng/ml c) 425 ng/ml d) 800 ng/ml	a) 2 & 4 hr after 50 mg b) 4 hr after 25 mg/d for 1 wk c) 4 hr after 50 mg/d for 1 wk d) 4 hr after 100 mg/d for 1 wk 23 old with severe hypertension secondary to postpartum thyroiditis with hyperthyroidism HPLC
MILK; BLOOD PLASMA; CONSUMER EXPOSURE; DELIBERATE EXPOSURE; ADULTS; INFANTS; HYPERTENSION; HYPERTHYROIDISM; ANTIHYPERTENSIVE AGENTS; LACTATION; DRUGS White, W.B.; Andreoli, J.W.; Wong, S.H.; Cohn, R.D. 1984 Obstetrics and Gynecology 63(3):425-445				

Tissue	Cases Exposure Route	Range	Mean	General Information
10027 Blood, plasma	6 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 242+/-20 ng/ml b) 144+/-16 ng/ml c) 222+/-19 ng/ml d) 207+/-23 ng/ml	a) 100 mg/day b) 100 mg/day with 1000 mg ampicillin c) 100 mg/day with 500 mg aspirin d) 100 mg/day with 300 mg allopurinol Steady state levels after 6 days Healthy 25-32 yr olds During exercise, blood pressures increased with atenolol plus ampicillin treatment. No pressure differences between monotherapy and combined treatments in patients at rest. Fluorometry
ADULTS; HYPERTENSION; BLOOD PLASMA; ANTIHYPERTENSIVE AGENTS; COMPARATIVE EVALUATIONS; DRUGS Schafer-Korting, M.; Kirch, W.; Axthelm, T.; Kohler, H.; Mutschler, E. 1983 Clinical Pharmacology and Therapeutics 33(3):283-288				

Acetamide, 2-(p-(2-hydroxy-3-(isopropylamino)propoxy)phenyl)- (8 CI); Benseenacetamide, 4-(2-hydroxy-3-((1-methylethyl)amino)propoxy)- (9 CI)
29122-68-7
C14-H22-N2-O3
MW 266.34, MP 146-148 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10026 Blood, plasma	6 Ingestion	a) 2.5-0.95 ug/ml b) 1.3-0.65 ug/ml c) 0.8-0.24 ug/ml d) 0.4-0.17 ug/ml Range of means	a) Not given b) Not given c) Not given d) Not given	a) 2 and 8 hr after 400 mg b) 2 and 8 hr after 200 mg c) 2 and 8 hr after 100 mg d) 2 and 8 hr after 50 mg Estimated from graph Healthy 21-28 yr olds Fluorometry
IRELAND; ADULTS; BLOOD PLASMA; ANTIHYPERTENSIVE AGENTS; DRUGS; COMPARATIVE EVALUATIONS				
Salem, S.A.; McDevitt, D.G. 1983 Clinical Pharmacology and Therapeutics 33(1):52-57				

Tissue	Cases Exposure Route	Range	Mean	General Information
10029 Blood, plasma	21 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 511+/-59 ng/ml b) 483+/-52 ng/ml c) 5802+/-676 ng.hr/ml d) 4297+/-588 ng.hr/ml	a) Controls, peak at 3.15+/-0.45 hr b) Patients with chronic liver disease, peak at 3.1+/-0.46 hr c) Controls, area under curve (AUC) d) Patients with chronic liver disease, AUC 100 mg oral. Data also for 25 mg IV. Did not accumulate in patients with hepatic disease and normal renal function. Healthy volunteers (mean age 31.1+/-4.0 yr, 6 males, 6 females, ht 159+/-6.2 cm, wt 61.7+/-4.2 kg) or patients (47.5+/-6.7 yr, ht 165+/-6.3 cm, wt 69.8+/-8.1 kg, 11 males, 2 females) TLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; LIVER DISEASES; KIDNEY DISEASES; HYPERTENSION; HEART DISEASES; CARDIOVASCULAR DISEASES; BETA BLOCKER; DRUGS; DRUG THERAPY; BIOACCUMULATION				
Kirch, W.; Schafer-Korting, M.; Mutschler, E.; Ohnhaus, E.E.; Braun, W. 1983 Journal of Clinical Pharmacology 23:171-177				

Tissue	Cases Exposure Route	Range	Mean	General Information
10030 Milk	1 Ingestion	a) 900 ng/ml-1600 ng/ml b) Not given c) Not given d) Not given	a) Not given b) 675 ng/ml c) 1200 ng/ml d) 1800 ng/ml	a) 2 & 4 hr after 50 mg b) 4 hr after 25 mg/d for 1 wk c) 4 hr after 50 mg/d for 1 wk d) 4 hr after 100 mg/d for 1 wk Peak 3.6X higher than simultaneous plasma levels. Plasma levels in infant 4 hr after ingesting milk with 1800 ng/ml <10 ng/ml (detection limit). No apparent signs of drug effect on infant. 23 old with severe hypertension secondary to postpartum thyroiditis with hyperthyroidism HPLC
[illegible] DELIBERATE EXPOSURE; ADULTS; INFANTS; HYPERTENSION; HYPERTHYROIDISM; ANTIHYPERTENSIVE AGENT				

Acetamide, 2,2-dichloro-N-(beta-hydroxy-alpha-(hydroxymethyl)-p-(methylsulfonyl)phenethyl)- , D-threo-(+)- (8 CI) Acetamide, 2,2-dichloro-N-(2-hydroxy-1-(hydroxymethyl)-2-(4-(methylsulfonyl)phenyl)ethyl)-, (R-(R*,R*))- (9 CI)
15318-45-3
C12-H15-Cl2-N-O5-S
MW 356.2, MP approx 164 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10031 Blood, plasma	12 Ingestion	a) 3.12+/-1.51-0.61+/-0.38 ug/ml b) 0.55-5.29 ug/ml c) 0.82-2.19 ug/ml d) Not given	a) Not applicable b) 2.87+/-2.26 ug/ml c) 1.20+/-0.58 ug/ml d) 3.67 ug/ml	a) 1-8 hr, peak (3.64+/-1.76 ug/ml) 2 hr after 500 mg, range of means, N=7 b) 24 hr after first dose of 500 mg t.i.d. for 2 d, N=5 c) 48 hr after first dose of 500 mg t.i.d. for 2 d, N=5 d) Peak 1.62 hr after 500 mg, N=7. Normal puerpera, 20-31 yr old, wt 48-87 kg GC-EC
10032 Milk	12 Ingestion	a) 0.62+/-0.53-1.14+/-0.55 ug/ml b) 0.86-2.43 ug/ml c) 1.05-2.47 ug/ml d) Not given	a) Not applicable b) 1.86+/-0.63 ug/ml c) 1.62+/-0.62 ug/ml d) 2.21 ug/ml	a) 1-8 hr, peak (2.16+/-1.04 ug/ml) 4 hr after 500 mg, range of means, N=7 b) 24 hr after first dose of 500 mg t.i.d. for 2 d, N=5 c) 48 hr after first dose of 500 mg t.i.d. for 2 d, N=5 d) Peak 2.58 hr after 500 mg, N=7. Normal puerpera, 20-31 yr old, wt 48-87 kg GC-EC
BLOOD PLASMA; MILK; DELIBERATE EXPOSURE; ADULTS; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; INFANTS; LACTATION Plomp, T.A.; Thiery, M.; Maes, R.A.A. 1983 Veterinary and Human Toxicology 25(3):167-172				

Acetamide, 2,2-dichloro-N-(beta-hydroxy-alpha-(hydroxymethyl)-p-nitrophenethyl)-, D-threo-(-)-, (8 CI); Acetamide, 2,2-dichloro-N-(2-hydroxy-1-(hydroxymethyl)-2-(4-nitrophenyl)ethyl)-,(R-(R*,R*)) - (9 CI)
56-75-7
C11-H12-Cl2-N2-O5
MW 323.14, MP 150.5-151.5 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10033 Blood, plasma	12 Injection Ingestion	a) 5.67+/-2.85-5.72+/-2.62 mg/l b) 7.04+/-3.04-7.28+/-2.92 mg/l c) 9.70+/-7.41-13.7+/-9.78 mg/l	a) Not applicable b) Not applicable c) Not applicable	a) Before and 6 hr after IV dose as succinate. Peak, 16.6+/-4.23 mg/l at 1.8+/-0.44 hr b) Before and 6 hr after oral dose as base. Peak, 22.3+/-7.64 mg/l at 1.53+/-0.95 hr c) Before and 6 hr after oral dose as palmitate. Peak, 22.8+/-11.8 mg/l at 2.12+/-1.36 hr Dose regimen: 1 g every 6 hr for minimum of 7 doses. Each patient given first dose as succinate. Remainder of doses were given orally in crossover fashion. 5-25 mg/l considered therapeutic, non-toxic. Neurosurgical patients, Hermann Hospital, Houston, 16-67 yr olds GC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; TEXAS; NEWBORN; LIVER DISEASES; ANTIBIOTICS; BIOAVAILABILITY; BIOLOGICAL MONITORING; DRUGS; DRUG THERAPY Kramer, W.G.; Rensimer, E.R.; Ericsson, C.D.; Pickering, L.K. 1984 Journal of Clinical Pharmacology 24:181-186				

Acetamide, 2,2-dichloro-N-(beta-hydroxy-alpha-(hydroxymethyl)-p-nitrophenethyl)-, D-threo-(-)-, (8 CI); Acetamide, 2,2-dichloro-N-(2-hydroxy-1-(hydroxymethyl) 2-(4-nitrophenyl)ethyl)-,(R-(R*,R*)) - (9 CI)
56-75-7
C11-H12-Cl2-N2-O5
MW 323.14, MP 150.5-151.5 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10084 Blood, plasma	5 Ingestion	a) 2.04+/-0.68-0.75+/-0.35 ug/ml b) 0.60-5.62 ug/ml c) 0.65-2.00 ug/ml d) Not given	a) Not applicable b) 3.70+/-2.27 ug/ml c) 1.06+/-0.54 ug/ml d) 5.48 ug/ml	a) 1-8 hr, peak (5.33+/-0.39 ug/ml) 2 hr after 500 mg, range of means, N=4 b) 24 hr after first dose of 500 mg t.i.d. for 2 d, N=5 c) 48 hr after first dose of 500 mg t.i.d. for 2 d, N=5 d) Peak 1.39 hr after 500 mg, N=4. Normal puerpera, 20-31 yr old, wt 48-87 kg GC-EC
BLOOD PLASMA; MILK; DELIBERATE EXPOSURE; ADULTS; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; INFANTS; LACTATION Plomp, T.A.; Thiery, M.; Maes, R.A.A. 1983 Veterinary and Human Toxicology 25(3):167-172				

Tissue	Cases Exposure Route	Range	Mean	General Information
10085 Blood, plasma	a) 4 b) 18 c) 3 Injection	a) 16.5-51.1 ug/ml b) 11.0-37.0 ug/ml c) 11.8-32.9 ug/ml	a) Not given b) Not given c) Not given	a) 0-0.4 yr, trough (6 hr), 11.2-35.7 ug/ml b) 0.5-2.3 yr, trough, 3.6-29.7 ug/ml c) 7.4-15.2 yr, trough 2.5-10.5 ug/ml Peaks 0.5-4.0 hr after infusion as succinate ester. Dose range, 50-152 mg/kg/day (6 hr intervals for minimum of 4 doses). Significant difference between a) and b), $P<0.05$. Acutely ill patients, 5.2-54.2 kg HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; AGE; INFANTS; CHILDREN; INFECTION; DRUGS; DRUG THERAPY; ANTIBIOTICS; BIOLOGICAL MONITORING; METABOLISM; METABOLITES Burchart, G.J.; Barrett, F.F.; Della Valle, R.; Meyer, M.C. 1983 Journal of Clincial Pharmacology 23:106-112				

Tissue	Cases Exposure Route	Range	Mean	General Information
10086 Blood, serum	7 Injection Ingestion	a) 13.1-25.0 ug/ml b) 10.3-20.4 ug/ml c) 4.8-11.2 ug/ml d) 4.3-14.4 ug/ml	a) 17.5+/-2.0 ug/ml b) 13.75+/-1.8 ug/ml c) 7.3+/-1.3 ug/ml d) 8.42+/-1.9 ug/ml S.E.	a) 90 min after dose as succinate b) 360 min c) 90 min after dose as palmitate d) 360 min Chloramphenicol-S dose: 25 mg/kg/d (premature infants) & 50 mg/kg/d (term infants) IV. Measurement after 48 hr of therapy. Chloramphenicol-P dose: oral every 6 hr, adjusted for serum level 10-25 ug/ml. Number of doses not stated. Significant differences: a) & c) ($p<0.025$), b) & d) ($p<0.05$). 3 d-32 wk old infants with infections, birth wt 680-3580 gm (1804-457 gm) & gestational age 26-40 wk (33+/-2 wk), Michigan HPLC
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; NEWBORN; PREMATURE INFANTS; INFECTION; DRUG THERAPY; ANTIBIOTICS; DRUGS Shankaran, S.; Kauffman, R.E. 1984 Pediatric Pharmacology and Therapeutics 105(1):113-116				

Acetamide, 2,2-dichloro-N-(beta-hydroxy-alpha-(hydroxymethyl)-p-nitrophenethyl)-, D-threo-(-)-, (8 CI); Acetamide, 2,2-dichloro-N-(2-hydroxy-1-(hydroxymethyl)-2-(4-nitrophenyl)ethyl)-,(R-(R*,R*)) - (9 CI)
56-75-7
C11-H12-Cl2-N2-O5
MW 323.14, MP 150.5-151.5 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10037 Blood, serum	10 Injection	a) 22.9-181.6 ug/ml b) 24.7-75.4 ug/ml c) 16.9-51.4 ug/ml d) 13.9-49.1 ug/ml e) 1.8-27.0 ug/ml f) 1.0-17.7 ug/ml	a) 77.1 ug/ml b) 42.2 ug/ml c) 27.7 ug/ml d) 24.9 ug/ml e) 8.4 ug/ml f) 5.3 ug/ml	a) Chloramphenicol succinate. Peak, 1st study b) Peak, 2nd study c) Chloramphenicol. Peak, 1st study d) Peak, 2nd study e) Chloramphenicol. Trough, 1st study f) Trough, 2nd study Steady-state levels after 19-26 mg/kg/6 hr as succinate over 0.5-1 hr for 2 days. 2nd study 2-17 days after the 1st study. 0.38-17.15 yr olds, wt 6.6-52.8 kg with secondary infections. HPLC
ADOLESCENTS; CHILDREN; INFANTS; INFECTION; BLOOD SERUM; ANTIBIOTICS; COMPARATIVE EVALUATIONS; DRUGS; DRUG THERAPY Nahata, M.C.; Powell, D.A. 1983 Clinical Pharmacology and Therapeutics 33(3):308-313				

Tissue	Cases Exposure Route	Range	Mean	General Information
10038 Blood, serum	83 Injection	a) 3-67 ug/ml b) 3-76 ug/ml c) 3-23 ug/ml d) 4-44 ug/ml e) 2-27 ug/ml f) 7-36 ug/ml	a) 14.1+/-11.1 ug/ml b) 16.5+/-12.5 ug/ml c) 9.4+/-5.2 ug/ml d) 16.6+/-7.6 ug/ml e) 12.1+/-5.1 ug/ml f) 20.6+/-5.7 ug/ml	a) Trough, no dilution, 18 cases b) Peak, no dilution, 18 cases c) Trough, diluted, 17 cases d) Peak, diluted, 17 cases e) Trough, loading dose and close monitoring, 48 cases f) Peak, loading dose and close monitoring, 48 cases Dose 12.5 mg/kg b.i.d. or 12.5 mg/kg q.i.d. dependent upon gestational and postnatal age. Dose as 100 mg/ml IV (a), b)) or 25 mg/ml IV (c)-f)) solution. Third study (e), f)) 20 mg/kg loading dose and monitored levels. Fewer unpredictable high levels with dilution, monitoring. Infants, premature (gestational age 32.8+/-4.7 wk, postnatal 12.7+/-23.8 d) and full term. (gestational age 35.7+/-5.0 wk, postnatal 8.1+/-10.3 d) Bioassay; HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; CANADA; PREMATURE INFANTS; INFANTS; NEWBORN; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; ACCIDENTAL POISONING; HEALTH HAZARDS Rajchgot, P.; Prober, C.G.; Soldin, S.J.; Good, F.; Harding, E.; Golas, C.; MacLeod, S. 1983 Clinical Pharmacology and Therapeutics 33(5):551-555				

Tissue	Cases Exposure Route	Range	Mean	General Information
10039 Milk	9 Ingestion	a) 0.55+/-0.62-0.31+/-0.20 ug/ml b) 0.52-3.50 ug/ml c) 0.51-0.85 ug/ml d) Not given	a) Not applicable b) 1.72+/-1.50 ug/ml c) 0.62+/-0.14 ug/ml d) 2.90 ug/ml	a) 1-8 hr, peak (3.24+/-0.88 ug/ml) 2 hr after 500 mg, range of means, N=4 b) 24 hr after first dose of 500 mg t.i.d. for 2 d, N=5 c) 48 hr after first dose of 500 mg t.i.d. for 2 d, N=5 d) Peak 1.40 hr after 500 mg, N=4. Normal puerpera, 20-31 yr old, wt 46-87 kg GC-EC
BLOOD PLASMA; MILK; DELIBERATE EXPOSURE; ADULTS; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; INFANTS; LACTATION Plomp, T.A.; Thiery, M.; Maes, R.A.A. 1983 Veterinary and Human Toxicology 25(3):167-172				

Acetamide, 2,2-dichloro-N-(beta-hydroxy-alpha-(hydroxymethyl)-p-nitrophenethyl)-, D-threo-(-)-, (8 CI); Acetamide, 2,2-dichloro-N-(2-hydroxy-1-(hydroxymethyl)-2-(4-nitrophenyl)ethyl)-,(R-(R*,R*)) - (9 CI)
56-75-7
C11-H12-Cl2-N2-O5
MW 323.14, MP 150.5-151.5 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10040 Urine	8 Ingestion	a) 0.38-2.58 mg b) 3.21-8.86 mg	a) Not given b) Not given	a) As palmitate, 6-hr total b) As glucuronide, 6-hr total Oral dose, chloramphenicol-P, every 6 hr adjusted for serum level of 10-25 ug/ml. 24-55% of dose in urine. Neonates with infections, Michigan HPLC
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; NEWBORN; PREMATURE INFANTS; INFECTION; DRUG THERAPY; ANTIBIOTICS; DRUGS Shanbaran, S.; Kauffman, R.E. 1984 Pediatric Pharmacology and Therapeutics 105(1):113-116				

Tissue	Cases Exposure Route	Range	Mean	General Information
10041 Urine	10 Injection	10-44%	27+/-11%	1 gm succinate ester infused over 1 hr. Total urine output over 6 hr. % dose excreted as unchanged ester. Neurosurgical patients, Hermann Hospital, Houston, 16-67 yr olds HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; TEXAS; NEWBORN; LIVER DISEASES; ANTIBIOTICS; BIOAVAILABILITY; BIOLOGICAL MONITORING; DRUGS; DRUG THERAPY Kramer, W.G.; Rensimer, E.R.; Ericsson, C.D.; Pickering, L.K. 1984 Journal of Clinical Pharmacology 24:181-186				

Tissue	Cases Exposure Route	Range	Mean	General Information
10042 Urine	10 Injection	a) 7.2-35.7% b) 3.6-14.4%	a) 20.9+/-8.3% b) 9.7+/-3.2%	a) Chloramphenical succinate ester b) Chloramphenical % dose recovered in 0.6 hr collection. Dose range, 50-152 mg/kg/day as chloramphenicol succinate ester at 6 hr intervals for at least 24 hrs. Acutely ill patients, 0.2-15.2 yrs, 5.2-54.2 kg HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; AGE; INFANTS; CHILDREN; INFECTION; DRUGS; DRUG THERAPY; ANTIBIOTICS; BIOLOGICAL MONITORING; METABOLISM; METABOLITES Burchart, G.J.; Barrett, F.F.; Della Valle, R.; Meyer, M.C. 1983 Journal of Clincial Pharmacology 23:106-112				

Acetanilide, 4'-hydroxy- (8 CI); Acetamide, N-(4-hydroxyphenyl)- (9 CI)
103-90-2
C8-H9-N-O2
MW 151.16, MP 169-170.5 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10043 Blood	1 Ingestion	Not applicable	172 mg/L	Postmortem levels after taking >12 Darvocet-N tablets 19 yr old male Caucasian, wt 77 kg, ht 1.68 m Unconsciousness, probably at >2 hr, <7 hr, death <14 hr, possibly <7 hr after ingestion HPLC
DELIBERATE EXPOSURE; DRUGS; SUICIDE; AUTOPSIES; BLOOD; URINE; ANALGESICS Eberhardt, R.D.; Cash, D.K. 1984 Journal of Analytical Toxicology 8:246-247				

Tissue	Cases Exposure Route	Range	Mean	General Information
10044 Blood	4 Ingestion	30-348 mg/l	147 mg/l	Level upon admission to hospital. Hospital survival was 2-5 d, death due to liver necrosis. 3 of 4 had therapeutic blood levels of phenobarbital, 2 had blood levels of phenytoin. 3 suicide, 1 accidental poisoning victims, 31-72 yr old. Cases recorded by Dade County Medical Examiner, occurred between 1978 and 1981 Vomiting, loss of consciousness Fatty degeneration, coagulative necrosis, sinusoidal congestion of liver
BLOOD; CONSUMER EXPOSURE; ADULTS; SUICIDE; LIVER DISEASES; ANALGESICS; ANTIPYRETICS; FORENSIC MEDICINE; DRUG ABUSE; DRUGS; BIOACCUMULATION; ACCIDENTAL POISONING; HEALTH HAZARDS Thomas, G.E.; Rao, V.J.; Davis, J.H. 1983 Journal of Forensic Sciences 28(4):977-984				

Tissue	Cases Exposure Route	Range	Mean	General Information
10045 Blood	1 Ingestion	Not applicable	3.9 mg/L	Collapsed 2 hr after ingesting 4-8 g trazadone, survived. 49 yr old female with chronic depression HPLC
CASE HISTORIES; DELIBERATE EXPOSURE; AUTOPSIES; SUICIDE; ANTIDEPRESSIVE AGENTS; DRUGS; DRUG ABUSE; BLOOD; URINE Root, I.; Ohlson, G.B. 1984 Journal of Analytical Toxicology 8:91-94				

Tissue	Cases Exposure Route	Range	Mean	General Information
10046 Blood	1 Ingestion	Not given	<1 ug/ml	Autopsy. Dose unknown. Combined levels of ethanol, methanol and isopropanol <5 mg/dl. Data also for clomipramine, zomepirac, caffeine, salicylates, indomethacin, oxycodone. 57 yr old treated for depression, joint pain. Excessive drinking on occasion. Confusion, weakness, intoxication, death. Death due to clomipramine toxicity. TLC
AUTOPSIES; BEHAVIOR DISORDERS; NEUROLOGIC MANIFESTATIONS; BLOOD; URINE; ANTIDEPRESSIVE AGENTS; ANALGESICS; DRUGS; DRUG ABUSE; ALCOHOLS; METABOLITES; CASE HISTORIES; DELIBERATE EXPOSURE Meatherall, R.C.; Guay, D.R.P.; Chalmers, J.L.; Keenan, J.R. 1983 Journal of Analytical Toxicology 7:168-171				

Acetanilide, 4'-hydroxy- (8 CI); Acetamide, N-(4-hydroxyphenyl)- (9 CI)
103-90-2
C8-H9-N-O2
MW 151.16, MP 169-170.5 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10047 Blood	a) 1 b) 12 c) 6	a) Not applicable b) 12-140 mg/l c) 40-320 mg/l	a) <10 mg/l b) 51 mg/l c) 133+/-103 mg/l	a) Single-drug death, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths, 1979-1980. Autopsy, Maryland State Medical Examiner's office. Death

BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS

Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1988 Journal of Analytical Toxicology 7:225-230

Tissue	Cases Exposure Route	Range	Mean	General Information
10048 Blood, plasma	a) 8 b) 6 Ingestion	a) 0-9 ug/ml b) 0-5 ug/ml	a) Not applicable b) Not applicable	a) Controls 0-240 min, peak (20 ug/ml) at 60 min b) Alcoholics 0-240 min, peak (16 ug/ml) at 60 min Alcoholics metabolise drug faster than do controls 4 males, 4 females, ages 32-62 yr. 6 male alcoholics, ages 43-66 yr. HPLC

BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; CIRRHOSIS; BEHAVIOR DISORDERS; ANTIPYRETICS; ANALGESICS; DRUG THERAPY; DRUGS; ALCOHOLIC BEVERAGES; BIOACCUMULATION; HEALTH HAZARDS; METABOLISM; DRUG ABUSE

Dietz, A.J.; Carlson, J.D.; Wahba Khalil, S.K.; Nygard, G. 1984 Journal of Clinical Pharmacology 24:305-308

Tissue	Cases Exposure Route	Range	Mean	General Information
10049 Blood, plasma	5 Injection Ingestion	a) Not given b) Not given	a) 329+/-42 ml/min b) 292+/-49 ml/min	a) Dose 5 mg/kg b) Dose 20 mg/kg Administered IV and orally over 2 hrs 4 times (at least 1 wk apart). IV dose had significant effect on plasma clearance. Healthy, fasted subjects

DELIBERATE EXPOSURE; DRUGS; BLOOD PLASMA

Clements, J.A.; Critchley, J.A.J.H.; Prescott, L.F. 1983 Journal of Pharmacy and Pharmacology 35:11P

Tissue	Cases Exposure Route	Range	Mean	General Information
10050 Blood, plasma	Ingestion	0.076-1.660 ug/0.5mL	Not given	Range of means. 9 volunteers administered 325 mg dose at 0 and 6 hrs. Peaks at 1 hr (1.431 ug/0.5 ml) and 8 hrs (1.660 ug/ml). New assay method is sensitive (8 ng/ml) and requires only 0.1 ml plasma sample. Volunteers HPLC

BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; MEASUREMENT METHODS; ANALGESICS; ANTIPYRETICS; BIOLOGICAL MONITORING; HEALTH HAZARDS

Korduba, C.A.; Petrussi, R.P.. 1984 Journal of Pharmaceutical Sciences 73(1):117-119

Acetanilide, 4'-hydroxy- (8 CI); Acetamide, N-(4-hydroxyphenyl)- (9 CI)
103-90-2
C8-H9-N-O2
MW 151.16, MP 169-170.5 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10061 Blood, plasma	10 Ingestion	a) 20.0+/-3.6-1.5+/-0.3 ug/ml b) 19.4+/-3.1-1.1+/-0.3 ug/ml c) 15.9+/-3.1-1.3+/-0.3 ug/ml	a) Not applicable b) Not applicable c) Not applicable	a) Normal diet, 0-11 hr, peak (22.6+/-2.6 ug/ml) at 0.8+/-0.1 hr after b) Brussels sprouts-cabbage containing test diet, 0-11 hr, peak (22.5+/-2.0 ug/ml) at 0.9+/-0.2 hr after c) Normal diet, 0-11 hr, peak (21.6+/-2.1 ug/ml) at 0.8+/-0.1 hr After 1500 mg dose Data about metabolites also given. Test diet stimulated metabolism to gluconuride, but not to sulfate. Healthy volunteers, nonsmokers HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; DRUG INTERACTION; BIOACCUMULATION; FOODS; METABOLISM; METABOLITES; DRUGS Pantuck, E.J.; Pantuck, C.B.; Anderson, K.E.; Wattenberg, L.W.; Conney, A.H.; Kappas, A. 1984 Clinical Pharmacology and Therapeutics 35(2):161-169				

Tissue	Cases Exposure Route	Range	Mean	General Information
10062 Blood, plasma	4 Ingestion		a) 145 mg/l b) 318 mg/l c) 230 mg/l	a) 12 hr after 2-6.5X recommended dose. 52 yr old. Death from hepatorenal failure b) 4 hr after 2.5X recommended dose. Renal failure and liver damage. Patient recovered c) 2 hr after patient found unconscious from overdose of paracetamol (10X recommended dose) + prochlorperazine (unknown dose). Time of ingestion not known. Death from cardiac arrest All cases given overdose of antidote, acetylcysteine. Overdose patients
BLOOD PLASMA; DELIBERATE EXPOSURE; DRUGS; DRUG ABUSE Mant, T.G.K.; Tempowski, J.H.; Volans, G.N.; Talbot, J.C.C. 1984 British Medical Journal 289:217-219				

Tissue	Cases Exposure Route	Range	Mean	General Information
10063 Blood, plasma	a) 7 b) 7 Ingestion	a) 17-4 ug/ml b) 25-2 ug/ml	a) Not applicable b) Not applicable	a) Controls, 0.5-8 hr, peak (25 ug/ml) at 1 hr b) Oral contraceptive group, 0.5-8 hr, peak (27 ug/ml) 1 hr after 1.5 gm and 100 ml water. Healthy volunteers, half taking oral contraceptives, 21-34 yr old HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; ORAL CONTRACEPTIVES; ANALGESICS; ANTIPYRETICS; DRUG THERAPY; DRUGS; DRUG INTERACTION; HORMONES; BIOACCUMULATION; METABOLITES Mitchell, M.C.; Hanew, T.; Meredith, C.G.; Schenker, S. 1983 Clinical Pharmacology and Therapeutics 34(1):48-53				

Acetanilide, 4'-hydroxy- (8 CI); Acetamide, N-(4-hydroxyphenyl)- (9 CI)
103-90-2
C8-H9-N-O2
MW 151.16, MP 169-170.5 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10084 Blood, plasma	50 Ingestion	a) 0.26-0.95 ug/ml b) 17.50-1.25 ug/ml	a) Not applicable b) Not applicable	a) Tablets, peak 13.6+/-3.7 ug/ml at 0.95+/-0.64 hr b) Solution, peak 16.6+/-5.5 ug/ml at 0.49+/-0.36 hr 0.25-12 hr, dose for each, 50 mg pentazocine and 1300 mg acetaminophen. Bioavailability equal in both forms and for combined drugs. Ranges of means. Estimated from graph. Healthy 19-33 yr old males, wt 53-104 kg HPLC

BLOOD PLASMA; DELIBERATE EXPOSURE; ANALGESICS; ANTIPYRETICS; DRUGS; DRUG INTERACTION; BIOAVAILABILITY
Prits, A.K.; Benziger, D.P.; Peterson, J.E.; Park, G.B.; Edelson, J. 1984 Journal of Pharmaceutical Sciences 73(3):326-331

Tissue	Cases Exposure Route	Range	Mean	General Information
10088 Blood, plasma	9 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 24.9+/-2.5 ug/ml b) 23.4+/-2.2 ug/ml c) 24.8+/-3.1 ug/ml d) 35.9+/-3.5 ug/ml e) 34.7+/-3.6 ug/ml f) 33.5+/-3.4 ug/ml g) 11.4+/-1.1 ug/ml h) 10.9+/-1.0 ug/ml i) 9.9+/-0.9 ug/ml	a) Control diet (CD) b) Charcoal-broiled beef diet (CBBD) c) CD after CBBD d) Glucuronide metabolite, CD e) Glucuronide metabolite, CBBD f) Glucuronide metabolite, CD after CBBD g) Sulfate metabolite, CD h) Sulfate metabolite, CBBD i) Sulfate metabolite, CD after CBBD Peaks after 1500 mg. Healthy volunteers, 8 males, 1 female, 25-30 yr old HPLC

BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; ANALGESICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; METABOLISM; METABOLITES; FOODS; MEAT
Anderson, K.E.; Schneider, J.; Pantuck, E.J.; Pantuck, C.B.; Mudge, G.H.; Welch, R.M.; Conney, A.H.; Kappas, A. 1983 Clinical Pharmacology and Therapeutics 34(3):369-374

Tissue	Cases Exposure Route	Range	Mean	General Information
10056 Blood, plasma	23 Ingestion	a) Not given b) Not given	a) 16.7+/-1.3 ug/ml b) 2816+/-170 ug.min/ml	a) Peak 40+/-9.4 min after 900 mg and 750 mg chlorzoxazone b) Area under curve, 10 hr after 900 mg and 750 mg chlorzoxazone. Healthy volunteers, 20-39 yr old GC

BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; MUSCLE RELAXANTS; DRUGS; DRUG THERAPY; BIOACCUMULATION
Desiraju, R.K.; Renzi, N.L., Jr.; Nayak, R.K.; Ng, K.-T. 1983 Journal of Pharmaceutical Sciences 72(9):991-994

Acetanilide, 4'-hydroxy- (8 CI); Acetamide, N-(4-hydroxyphenyl)- (9 CI)
103-90-2
C8-H9-N-O2
MW 151.16, MP 169-170.5 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10057 Blood, serum	1 Ingestion	Not applicable	863 ug/ml	5 hr after accidental ingestion of 10 gm Healthy 1 yr old Shallow respiration, thready pulse, unresponsiveness, apneic periods & mottled skin Icterus & hepatomegaly HPLC
BLOOD SERUM; URINE; CONSUMER EXPOSURE; INFANTS; ANALGESICS; ACCIDENTAL POISONING; CASE HISTORIES; DRUGS; HEMODIALYSIS Lieh-Lai, M.W.; Sarnink, A.P.; Newton, J.F.; Miceli, J.N.; Fleischmann, L.E.; Hook, J.B.; Kauffman, R.E. 1984 Journal of Pediatrics 105(1):125-128				

Tissue	Cases Exposure Route	Range	Mean	General Information
10058 Blood, serum	8 Ingestion	a) 0.070-0.200 mM b) 0.052-0.134 mM c) 0.018-0.083 mM	a) Not given b) Not given c) Not given	a) Acetaminophen b) Acetaminophen glucuronide c) Acetaminophen sulfate After 1.5 mg 6 male, 2 female, 26-35 yr olds HPLC
URINE; BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; ANALGESICS; DRUG THERAPY; DRUGS; BIOACCUMULATION; METABOLITES Morris, M.E.; Levy, G. 1984 Journal of Pharmaceutical Sciences 73(8):1038-1041				

Tissue	Cases Exposure Route	Range	Mean	General Information
10059 Blood, serum	20 Ingestion	a) Not given b) Not given	a) 14.2+/-4.0 mcg/ml b) 13.8+/-4.3 mcg/ml	a) Peak 0.9+/-0.5 hr after last dose of 650 mg q.i.d. for 2 d b) Peak 0.8+/-0.4 hr after last dose of 650 mg q.i.d. and 400 mg ibuprofen q.i.d. for 2 d Healthy volunteers, 19-42 yr old, wt 54-88 kg, 12 males, 8 females HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; ANALGESICS; DRUGS; DRUG THERAPY; DRUG INTERACTION; COMPARATIVE EVALUATIONS; BIOACCUMULATION; ANTIPYRETICS Wright, C.E., III; Antal, E.J.; Gillespie, W.R.; Albert, K.S. 1983 Clinical Pharmacology and Therapeutics 34(5):707-710				

Tissue	Cases Exposure Route	Range	Mean	General Information
10060 Urine	5 Ingestion	19-9% 57.4-90% dose	77.3% % of dose	1 g dose. Acetaminophen and major metabolites, 24 hr cumulative excretion. Range of means. Normal males, age 23-37 yr NMR
URINE; DELIBERATE EXPOSURE; ADULTS; MEASUREMENT METHODS; DRUGS; ANALGESICS; METABOLITES Bales, J.R.; Sadler, P.J.; Nicholson, J.K.; Timbrell, J.A. 1984 Clinical Chemistry 30(10):1631-1636				

Acetanilide, 4'-hydroxy- (8 CI); Acetamide, N-(4-hydroxyphenyl)- (9 CI)
103-90-2
C8-H9-N-O2
MW 151.16, MP 169-170.5 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10061 Urine	1 Ingestion	Not applicable	2 gm	Total acetaminophen and metabolites for 72 hr. Collection started 8 hr after accidental ingestion of 10 gm. Healthy 1 yr old Shallow respiration, thready pulse, unresponsiveness, apneic periods & mottled skin Icterus & hepatomegaly HPLC

BLOOD SERUM; URINE; CONSUMER EXPOSURE; INFANTS; ANALGESICS; ACCIDENTAL POISONING; CASE HISTORIES; DRUGS; HEMODIALYSIS
Lieh-Lai, M.W.; Sarniak, A.P.; Newton, J.F.; Micell, J.N.; Pleischmann, L.E.; Hook, J.B.; Kauffman, R.E. 1984 Journal of Pediatrics 105(1):125-128

Tissue	Cases Exposure Route	Range	Mean	General Information
10062 Urine	8 Ingestion	a) 3.26-8.92 b) 80.9-120 c) 116-200 ml/min/1.73 sq m	a) 6.32+/-1.95 b) 100+/-13.6 c) 161+/-30.6 ml/min/1.73 sq m	a) Acetaminophen b) Acetaminophen glucuronide c) Acetaminophen sulfate Renal clearance at 2 hr after 1.5 mg 6 male, 2 female, 26-35 yr olds HPLC

URINE; BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; ANALGESICS; DRUG THERAPY; DRUGS; BIOACCUMULATION; METABOLITES
Morris, M.E.; Levy, G. 1984 Journal of Pharmaceutical Sciences 73(8):1038-1041

Tissue	Cases Exposure Route	Range	Mean	General Information
10063 Urine	8 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 89.6+/-10.7% b) 87.0+/-8.5% c) 56.5+/-24.3% d) 58.2+/-15.1%	a) 1 gm dose b) 1 gm dose + 18.0 g sodium sulfate c) 1 gm dose + 10 g activated charcoal d) 1 gm dose + 10 g activated charcoal + 18.0 g sodium sulfate Total excretions expressed as % dose recovery of drug or metabolites. Relative composition of recovered excretion products similar (4.6+/-0.21% as drug, 48.1+/-8.53% as glucuronide metabolite, and 47.0+/-8.0% as sulfate metabolite) for each treatment. Healthy volunteers, 22-36 yr old HPLC

URINE; DELIBERATE EXPOSURE; ANALGESICS; ANTIPYRETICS; DRUG INTERACTION; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS; BIOAVAILABILITY; METABOLITES; DRUGS
Galinsky, R.E.; Levy, G. 1984 Clinical Toxicology 22(1):21-30

Acetanilide, 4'-hydroxy- (8 CI); Acetamide, N-(4-hydroxyphenyl)- (9 CI)
103-90-2
C8-H9-N-O2
MW 151.16, MP 169-170.5 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10064 Urine	9 Ingestion	Not given	a) 239+/-20 umol/24 hr b) 223+/-27 umol/24 hr c) 5293+/-326 umol/24 hr d) 5736+/-324 umol/24 hr e) 351+/-38 umol/24 hr f) 304+/-31 umol/24 hr g) 103+/-17 umol/24 hr h) 80+/-17 umol/24 hr	a) Parent compound b) Parent compound c) Acetaminophen glucuronide d) Acetaminophen glucuronide e) Cysteine conjugate f) Cysteine conjugate g) 3-Methoxy acetaminophen sulfate h) 3-Methoxy acetaminophen sulfate Dose was 1500 ml. In a), c), e), g), normal diet, 24 hr recovery. In b), d), f), h), brussels sprouts-cabbage containing diet, 24 hr recovery. Other metabolite data given. Depression of cysteine conjugate pathway, which involves tonic intermediate, considered important. Healthy volunteers, nonsmokers HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; DRUG INTERACTION; BIOACCUMULATION; FOODS; METABOLISM; METABOLITES; DRUGS Pantuck, E.J.; Pantuck, C.B.; Anderson, K.E.; Wattenberg, L.W.; Conney, A.H.; Kappas, A. 1984 Clinical Pharmacology and Therapeutics 35(2):161-169				

Tissue	Cases Exposure Route	Range	Mean	General Information
10065 Urine	9 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 313+/-26 umol b) 269+/-31 umol c) 5714+/-241 umol d) 5734+/-271 umol e) 2909+/-216 umol f) 3122+/-179 umol g) 413+/-69 umol h) 376+/-35 umol /24 hr	a) Control diet (CD) b) Charcoal-broiled beef diet (CBBD) c) Glucuronide metabolite, CD d) Glucuronide metabolite, CBBD e) Sulfate metabolite, CD f) Sulfate metabolite, CBBD g) Cysteine conjugate metabolite, CD h) Cysteine conjugate metabolite, CBBD, 1500 mg. Other metabolite levels given (no difference with respect to diet). Healthy volunteers, 8 males, 1 female, 25-30 yr old HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; ANALGESICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; METABOLISM; METABOLITES; FOODS; MEAT Anderson, K.E.; Schneider, J.; Pantuck, E.J.; Pantuck, C.B.; Mudge, G.H.; Welch, R.M.; Conney, A.H.; Kappas, A. 1983 Clinical Pharmacology and Therapeutics 34(3):360-374				

Acetanilide, 4'-hydroxy- (8 CI); Acetamide, N-(4-hydroxyphenyl)- (9 CI)
103-90-2
C8-H9-N-O2
MW 151.16, MP 169-170.5 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10066 Urine	1 Ingestion	Not given	<1 ug/ml	Autopsy. Dose unknown. Combined levels of ethanol, methanol and isopropanol <5 mg/dl. Data also for clomipramine, zomepirac, caffeine, salicylates, indomethacin, oxycodone, lorazepam. 57 yr old treated for depression, joint pain. Excessive drinking on occasion. Confusion, weakness, intoxication, death. Death due to clomipramine toxicity. TLC
AUTOPSIES; BEHAVIOR DISORDERS; NEUROLOGIC MANIFESTATIONS; BLOOD; URINE; ANTIDEPRESSIVE AGENTS; ANALGESICS; DRUGS; DRUG ABUSE; ALCOHOLS; METABOLITES; CASE HISTORIES; DELIBERATE EXPOSURE Meatherall, R.C.; Guay, D.R.P.; Chalmers, J.L.; Keenan, J.R. 1988 Journal of Analytical Toxicology 7:168-171				

Tissue	Cases Exposure Route	Range	Mean	General Information
10067 Urine	10 Ingestion	a) Not given b) Not given c) Not given	a) 97+/-2% b) 97+/-2% c) 98+/-2% % of dose	a) Urinary recovery after 20 mg/kg b) Same dose with 800 mg cimetidine 1 hr before and 400 mg 4, 8 and 12 hr after dose c) Same dose with 0.6 g/kg ethanol 12.5-1 hr before dose and 0.1 and 0.16 g/kg/hr for 8 hr in occasional and heavy drinkers, respectively Ethanol reduced levels of hepatotoxic metabolites. 37.1 yr old 77.6 kg healthy male volunteers HPLC
URINE; DELIBERATE EXPOSURE; ADULTS; DRUGS; DRUG INTERACTION Critchley, J.A.J.H.; Scott, A.W.; Dyson, E.H.; Jarvie, D.R.; Prescott, L.F. 1983 Lancet 1(8336):1375-1376				

Acetic acid, (((2-((2-(((aminocarbonyl)oxy)methyl)-4-oxo-1-sulfo-3-azetidinyl)amino)-1-(2-amino-4-thiazolyl)-2-oxoethylidene)amino)oxy)-, (2S-(2alpha,3alpha(Z)))-
87638-04-8
C12-H14-N6-O10-S2

Tissue	Cases Exposure Route	Range	Mean	General Information
10068 Blood, plasma	6 Injection Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 35.5 ug/ml b) 77.7 ug/ml c) 150.0 ug/ml d) 65.0 ug/ml	a) Peak immediately after 500 mg IV b) Peak immediately after 1000 mg IV c) Peak immediately after 2000 mg IV d) Peak immediately after 1000 mg IV and 2000 mg oral probenecid. Healthy volunteers Well diffusion

(next page)

Acetic acid, (((2-((2-(((aminocarbonyl)oxy)methyl)-4-oxo-1-sulfo-3-azetidinyl)amino)-1-(2-amino-4-thiazolyl)-2-oxoethylidene)amino)oxy)-, (2S-(2alpha,3alpha(Z)))-
87638-04-8
C12-H14-N6-O10-S2

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
10060 Urine	6 Injection Ingestion	a) Not given b) Not given c) Not given d) Not given e) 94-98%	a) 78.0+/-10.3% b) 85.2+/-3.2% c) 84.7+/-3.2% d) 76.4+/-14.9% e) 96%	a) 500 mg IV b) 1000 mg IV c) 2000 mg IV d) 1000 mg IV plus 2 g oral probenecid e) 100 uCi [C-14]-parent IV % recovered in 72 hr. Healthy volunteers Well diffusion
BLOOD PLASMA; URINE; FECES; DELIBERATE EXPOSURE; SWITZERLAND; ADULTS; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; RADIONUCLIDES Weidekamm, E.; Stoeckel, K.; Egger, H.-J.; Riegler, W.H. 1984 Antimicrobial Agents and Chemotherapy 26(6):898-902				

Adenosine, 5'-((L-3-amino-3-carboxypropyl)methylsulfonio)-5'-deoxy-, hydroxide, inner salt (8 CI); Adenosine, 5'-((3-amino-3-carboxypropyl)methylsulfonio)-5'-deoxy, hydroxide, inner salt, (3S)- (9 CI)
29908-03-0
C15-H22-N6-O5-S

Tissue	Cases Exposure Route	Range	Mean	General Information
10070 Cerebrospinal fluid	17 Injection	a) 47.6-55.1 ng/ml b) 51.6-61.6 ng/ml c) 60.8-70.4 ng/ml d) 51.1-60.9 ng/ml e) 64.3-83.3 nmol/l f) 74.4-100.5 nmol/l g) 93.9-122.3 nmol/l h) 80.7-108.9 nmol/l	a) 51.2 ng/ml b) 56.4 ng/ml c) 65.4 ng/ml d) 55.8 ng/ml e) 73.5 nmol/l f) 86.5 nmol/l g) 107.2 nmol/l h) 93.8 nmol/l	a) Baseline, treated group, 10 case b) Baseline, placebo group, 7 cases c) 24 hr after last treatment, 10 cases d) 24 hr after last placebo, 7 cases e) Metabolite, 5-hydroxyindoleacetic acid. Baseline, treated group, 9 cases f) Baseline, placebo groups, 7 cases g) 24 hr after last treatment, 9 cases h) 24 hr after last placebo, 7 cases 200 mg/d for 14 d. Levels are back-transformed (antilog) means. 26-73 yr olds (median 57) with depression
CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; ADULTS; DEPRESSION; ANTIDEPRESSIVE AGENTS; DRUGS; DRUG THERAPY; METABOLITES Botiglieri, T.; Laundy, M.; Martin, R.; Carney, M.W.P.; Niesenbaum, H.; Toone, B.K.; Johnson, A.L.; Reynolds, E.H. 1984 Lancet 1(8386):224				

Adriamycin (8 CI); 5,12-Naphthacenedione, 10-((3-amino-2,3,6-trideoxy-alpha-L-lyxo-hexopyranosyl)oxy)-7,8,9,10-tetrahydro- 6,8,11-trihydroxy-8-(hydroxyacetyl)-1-methoxy-, (8S-cis)- (9 CI)
23214-92-8
C27-H29-N-O11
MW 543.54, MP 189-170.5 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10071 Blood, plasma	1 Injection	a) 110-8 ng/ml b) 10-5 ng/ml	a) Not applicable b) Not applicable	a) 0-70 hr, peak (110 ng/ml) at 1 hr following 1.22 mg/kg IV b) 0-70 hr, peak (10 ng/ml) at 1 hr following 1.22 mg/kg IV Active 13-hydroxy-metabolite measured New assay. Patient on chemotherapy for malignancy HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; NETHERLANDS; CARCINOMAS; ANTITUMOR AGENTS; CHEMOTHERAPY; BIOACCUMULATION; DRUG THERAPY; DRUGS; METABOLITES Oosterbaan, M.J.M.; Dirks, R.J.M.; Vree, T.B.; Van Der Kleijn, E. 1984 Journal of Chromatography 306:323-332				

Tissue	Cases Exposure Route	Range	Mean	General Information
10072 Blood, plasma	8 Injection	a) 282-573 ng/ml b) 62-168 ng/ml c) 62-98 ng/ml	a) 315 ng/ml b) 124 ng/ml c) 82 ng/ml	a) 15 min after 50-90 mg IV b) 45 min after 50-90 mg IV c) 75 min after 50-90 mg IV. 38-79 yr old males, females being treated for cancer HPLC
BLOOD PLASMA; SALIVA; DELIBERATE EXPOSURE; ADULTS; CARCINOMAS; GASTROINTESTINAL DISEASES; ANTITUMOR AGENTS; DRUG THERAPY; DRUGS; BIOACCUMULATION; NEOPLASMS Cello, L.A.; DiGregorio, G.J.; Ruch, E.; Pace, J.; Pirsino, A.J. 1983 European Journal of Clinical Pharmacology 24:261-266				

Tissue	Cases Exposure Route	Range	Mean	General Information
10073 Blood, plasma	10 Injection	a) 5000-10 nm b) 0-10 nm	a) Not applicable b) Not applicable	a) 0-96 hr, peak (5000 nm) immediately after 75 mg/sq m infusion b) Adriamycinol metabolite, 0-96 hr, peak (60 nm) 1 hr after 75 mg/sq m infusion. Cancer patients with prior surgical resections HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; CARCINOMAS; SARCOMAS; ANTITUMOR AGENTS; DRUGS; DRUG THERAPY; BIOACCUMULATION; METABOLITES Green, R.P.; Collins, J.M.; Jenkins, J.F.; Speyer, J.L.; Myers, C.E. 1983 Cancer Research 43:3417-3421				

Adriamycin (8 CI); 5,12-Naphthacenedione, 10-((3-amino-2,3,6-trideoxy-alpha-L-lyxo-hexopyranosyl)oxy)-7,8,9,10-tetrahydro- 6,8,11-trihydroxy-8-(hydroxyacetyl)-1-methoxy-, (8S-cis)- (9 CI)
23214-92-8
C27-H29-N-O11
MW 543.54, MP 189-170.5 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10074 Lung	8 Injection	a) 0-0.4 nmol/g b) 0-1.2 nmol/g	a) Not given b) Not given	a) 0 and 40 min after isolated left lung perfusion for 50 min with 1-2 nmol/ml blood. In tumor b) In pulmonary tissue immediately surrounding tumors Drug undetectable in systemic circulation. Undetectable in 2 of 6 tumor samples. 18-36 yr old patients with multiple unresectable metastatic pulmonary sarcoma nodules HPLC
LUNGS; DELIBERATE EXPOSURE; NEOPLASMS; SARCOMAS; ANTITUMOR AGENTS; DRUG THERAPY; DRUGS; CHEMOTHERAPY; HEMOPERFUSION Minchin, R.F.; Johnston, M.R.; Aiken, M.A.; Boyd, M.R. 1984 Journal of Pharmacology and Experimental Therapeutics 229(1):193-198				

Tissue	Cases Exposure Route	Range	Mean	General Information
10075 Saliva	8 Injection	a) 13.5-36.0 ng/ml b) 15.2-35.0 ng/ml c) 11.6-25.0 ng/ml	a) 26.2 ng/ml b) 25.0 ng/ml c) 19.2 ng/ml	a) 15 min after 50-90 mg IV b) 45 min after 50-90 mg IV c) 75 min after 50-90 mg IV. 58-79 yr old males, females being treated for cancer HPLC
BLOOD PLASMA; SALIVA; DELIBERATE EXPOSURE; ADULTS; CARCINOMAS; GASTROINTESTINAL DISEASES; ANTITUMOR AGENTS; DRUG THERAPY; DRUGS; BIOACCUMULATION; NEOPLASMS Cello, L.A.; DiGregorio, G.J.; Ruch, E.; Pace, J.; Piraino, A.J. 1983 European Journal of Clinical Pharmacology 24:261-266				

Tissue	Cases Exposure Route	Range	Mean	General Information
10076 Urine	1 Injection	a) 10,000-1,000 ng/min b) 450-450 ng/min	a) Not applicable b) Not applicable	a) Renal excretion rate after 1.22 mg/kg IV. Total recovery over 70 hr 10.4% b) Renal excretion rate of 13-hydroxy-metabolite after 1.22 mg/kg IV. Total recovery over 70 hr 2.2% New assay. Patient on chemotherapy for malignancy HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; NETHERLANDS; CARCINOMAS; ANTITUMOR AGENTS; CHEMOTHERAPY; BIOACCUMULATION; DRUG THERAPY; DRUGS; METABOLITES Oosterbaan, M.J.M.; Dirks, R.J.M.; Vree, T.B.; Van Der Kleijn, E. 1984 Journal of Chromatography 306:323-332				

Ajmaline (8 CI); Ajmalan-17,21-diol, (17R,21alpha)- (9 CI)
4360-12-7
C20-H26-N2-O2
MW 326.42, MP 158-160 C, 205-207 C (anhydrous)

Tissue	Cases Exposure Route	Range	Mean	General Information
10077 Blood, plasma	4 Ingestion	a) Not given b) Not given c) 0.034-0.091 ug.hr/ml d) 0.383-2.825 ug.hr/ml	a) 0.018+/-0.004 ug/ml b) 0.141+/-0.044 ug/ml c) 0.050+/-0.014 ug/ml d) 1.100+/-0.579 ug/ml	a) Peak 1 hr after 50 mg b) Peak 2 hr after 50 mg and 200 mg quinidine sulphate c) Area under curve, after 50 mg d) Area under curve, after 50 mg and 200 mg quinidine sulphate New assay. Healthy volunteers, 28-37 yr old, wt 51-67 kg HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; DISEASES; CARDIOVASCULAR DISEASES; ANTIARRHYTHMIC AGENTS; DRUGS; DRUG THERAPY; DRUG INTERACTION; BIOACCUMULATION Hori, R.; Okumura, K.; Inui, K.-I.; Yasuhara, M.; Yamada, K.; Sakurai, T.; Kawai, C. 1984 Journal of Pharmacy and Pharmacology 36:202-204				

Alanine, 3-(3,4-dihydroxyphenyl)-, L- (8 CI); L-Tyrosine, 3-hydroxy- (9 CI)
59-92-7
C9-H11-N-O4
MW 197.19

Tissue	Cases Exposure Route	Range	Mean	General Information
10078 Blood, plasma	4	a) 2.20-3.63 b) 1.53-4.05 c) 2.22-3.35 AUC (mg/l x h)	a) 2.60 b) 2.55 c) 2.73 AUC (mg/l x h)	a) Proximal duodenum b) Distal duodenum c) Proximal jejunum Intubation sites 100 mg intubed following oral benseraside before (150 mg, 3X, 50 mg, 1X) and after (50 mg, 1X) l-dopa. Peak plasma l-dopa within 20 min (range: 1.41-3.44 mg/l), all 3 sites. Healthy 22-32 yr olds HPLC
ADULTS; NERVOUS SYSTEM DISEASES; BLOOD PLASMA; DRUG THERAPY; DRUGS; COMPARATIVE EVALUATIONS; AMINO ACIDS; DELIBERATE EXPOSURE Gundert-Remy, U.; Hildebrandt, R.; Stiebl, A.; Weber, E.; Zurcher, G.; Da Prada, M. 1983 European Journal of Clinical Pharmacology 25:69-72				

Alanine, 3-(4-(4-hydroxy-3-iodophenoxy)-3,5-diiodophenyl)-, L- (8 CI); L-Tyrosine, O-(4-hydroxy-3-iodophenyl)-3,5-diiodo- (9 CI)
6893-02-3
C15-H12-I3-N-O4
MW 651.01, MP 236-237 C (dec)

Tissue	Cases Exposure Route	Range	Mean	General Information
10070 Blood, serum	a) 1 b) 1 Ingestion	a) 226.6-84.6 ng/dL b) 549.9-398.9 ng/dL	a) Not given b) Not given	a) 2 and 27 hr after 1200 mg levothyroxine b) 4 and 52 hr after 40 mg levothyroxine After therapy with gastric lavage and activated charcoal plus propranolol, prednisone, propylthiouracil and cholestyramine failed to correct toxicity symptoms in a), 5 hr charcoal hemoperfusion (3 charcoal units, each primed with 210 mL banked blood) was started at 22 hr. Levels, ratios of, other thyroid hormones given. 2 and 3 yr old accidental poisoning victims Increased pulse rate RIA
BLOOD SERUM; DELIBERATE EXPOSURE; CHILDREN; DRUGS; HORMONES; HEMOPERFUSION; LAVAGE; ACCIDENTAL POISONING; METABOLITES Lehrner, L.M.; Weir, M.R. 1984 Pediatrics 73(3):313-317				

Aluminum
7429-90-5
Al
AtW 26.98154, MP 660 C, BP 2327 C, VP 1 mm Hg at 1540 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10060 Blood, plasma	1 Ingestion	Not applicable	220 ug/L	8 yr old female with chronic renal failure and neurologic deterioration, taking Al-containing antacids. Normal neurologic function, age 2. Denver, Colorado Encephalopathic syndrome(personality change, dysarthria-apraxia of speech, myoclonus, asterixis, seizures and abnormal electroencephalographic findings including generalized slowing and multifocal spikes) AAS
BLOOD PLASMA; BONE; DELIBERATE EXPOSURE; COLORADO; CHILDREN; KIDNEY DISEASES; ALUMINUM; DRUGS Sedman, A.B.; Wilkening, G.N.; Warady, B.A.; Lum, G.M.; Alfrey, A.C. 1984 Journal of Pediatrics 105(5):836-838				

Tissue	Cases Exposure Route	Range	Mean	General Information
10061 Blood, plasma	284 Dialysis Ingestion	a) 0.3-3.3 umol/l b) 1.0-4.3 umol/l	a) Not given b) Not given	a) <1.0 umol/l in dialysis water, patients not taking Al-hydroxide b) 0.3 umol/l or more in water, patients taking Al-hydroxide Ingestion of Al-hydroxide contributed to raised plasma levels. All patients underwent dialysis 1 yr before study began. Estimated from graphs Sheffield, England and surrounding area Incidence of fractures 4 times higher with water containing >1.0 umol/l
BLOOD PLASMA; ENVIRONMENTAL EXPOSURE; UNITED KINGDOM; KIDNEY DISEASES; METAL POISONING; COMPARATIVE EVALUATIONS; HEMODIALYSIS; ALUMINUM; WATER POLLUTION; DRUGS Platts, M.M.; Owen, G.; Smith, S. 1984 British Medical Journal 288:969-972				

Aluminum
7429-90-5
Al
AtW 26.98154, MP 660 C, BP 2327 C, VP 1 mm Hg at 1540 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10062 Blood, serum	a) 4 b) 10	a) 15-1730 ug/l b) Not given	a) 463 ug/l b) 2.0+/-0.4 ug/l	a) Dialysis patients b) Healthy subjects 37-62 yr old dialysis patients with osteomalacia. Treated 0-96 mo. AAS
ALUMINUM; BLOOD SERUM; BLOOD; LIVER; IRON; BONE; DRUGS Verbueken, A.H.; Van de Vyver, F.L.; Van Grieken, R.E.; Paulus, G.J.; Visser, W.J.; D'Haese, P.; De Broe, M.E. 1984 Clinical Chemistry 30(5):763-768				

Tissue	Cases Exposure Route	Range	Mean	General Information
10088 Blood, serum	a) 28 b) 11 c) 9 d) 8 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 2.5+/-0.4 umol/l b) 3.0+/-0.6 umol/l c) 2.7+/-0.8 umol/l d) 1.3+/-0.3 umol/l S.E. 1umol/l=27ug/l	a) Predominant osteitis fibrosa b) Predominant oesteomalacia c) Mixed osteitis fibrosa and osteomalacia d) Mild bone disease Sections of bone obtained by transiliac biopsy and histological appearance classified in above categories. Levels do not reflect cumulative amount in uremic patients or toxicity. End stage chronic renal disease patients on maintenance hemodialysis. 2 patients had dialysis encephalopathy and 5 had skeletal fractures. Most took Al salts for control of hyperphosphataemia Osteitis fibrosa, oesteomalacia, mixed osteitis fibrosa and osteomalacia, mild bone disease AAS
BLOOD SERUM; ALUMINUM; BONES; DELIBERATE EXPOSURE; BONE DISEASES; KIDNEY DISEASES; BIOPSIES; HEMODIALYSIS; MINERAL DEPOSITS; DRUGS Oundy, T.; Kanis, J.A. 1983 Lancet 1(8334): 1168				

Tissue	Cases Exposure Route	Range	Mean	General Information
10084 Blood, serum	6	42-244 ng/ml	Not given	Figures in letter to editor, no supporting protocol mentioned. Patients undergoing hemodialysis
BONE; BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; HEMODIALYSIS; ALUMINUM; BIOACCUMULATION; BIOLOGICAL MONITORING; HEALTH HAZARDS; METAL POISONING; DRUGS Meulen, J.v.d.; Bezemer, P.D.; Lips, P.; Oe, P.L. 1984 New England Journal of Medicine 311(20):1322				

Aluminum
7429-90-5
Al
AtW 26.98154, MP 660 C, BP 2327 C, VP 1 mm Hg at 1540 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10085 Blood, serum	a) 4 b) 8 c) 7 d) 16 Ingestion	a) 159.0-595.0 ng/ml b) 8.4-57 ng/ml c) Not given d) Not given	a) 371+/-178.9 ng/ml b) 27.0+/-18.6 ng/ml c) 20.29+/-9.2 ng/ml d) 21.04+/-4.9 ng/ml	a) <3 yr olds, dose >100mg/kg/d b) 4 -17.5 yr olds, dose <100mg/kg/d c) Children, no Al d) Healthy controls No dialysis. a) significantly different from b), c) and d) ($p<0.001$). Inverse correlations between levels and: ages ($r=-0.81$, $p<0.01$), wt ($r=-0.72$, $p<0.01$), age at start of therapy ($r=-0.77$, $p<0.01$). Positive correlation: daily dose and levels ($r=0.90$, $p<0.01$). 4 mo-17.5 yr olds with azotemia. Controls, children with normal renal function. Osteomalacia. Deposition in bone AAS
BLOOD SERUM; DELIBERATE EXPOSURE; INFANTS; CHILDREN; KIDNEY DISEASES; DRUGS; ALUMINUM; CALCIUM; CASE HISTORIES Andreoli, S.P.; Bergstein, J.M.; Sherrard, D.J. 1984 New England Journal of Medicine 310(17):1079-1084				

Tissue	Cases Exposure Route	Range	Mean	General Information
10086 Blood, serum	Ingestion	a) 0.6-15.15 umol/L b) 0.15-2.00 umol/L	a) 2.33 umol/L b) 0.52 umol/L	a) Patients taking Al-containing phosphate binders b) Other patients 2 yr monitering. In 3 case histories included here, levels fluctuated with Al(OH)3 treatment. No toxicity at levels <3.70 umol/L(100 ug/L) Regular hemodialysis patients. Includes case histories of 34 yr old male, 36 and 54 yr old females. Hyperaluminemia AAS
BLOOD SERUM; BONES; DELIBERATE EXPOSURE; CASE HISTORIES; BONE DISEASES; KIDNEY DISEASES; BIOPSIES; ALUMINUM; CALCIUM; BIOACCUMULATION; DRUGS Verbeelen, D.; Smeyers-Verbeke, J.; Sennesael J.; Massart, D.L. 1983 Lancet I(8334): 1168-1169				

Tissue	Cases Exposure Route	Range	Mean	General Information
10087 Blood, serum	5 Ingestion	a) <2-11 ug/l b) 3-12 ug/l c) <2-9 ug/l	a) 4+/-1 ug/l b) 7+/-1 ug/l c) 4+/-1 ug/l	a) Before treatment b) 125 mg for 17 days, test diet c) 5 mg for 17 days, control diet. Healthy 25+/-3 yr olds, mean ht 176+/-8 cm, mean wt 70+/-9 kg AAS
DELIBERATE EXPOSURE; BIOACCUMULATION; METABOLISM; URINE; ALUMINUM; WISCONSIN; ADULTS; BLOOD SERUM; DRUGS Greger, J.L.; Baier, M.J. 1983 Food and Chemical Toxicology 21(4):473-477				

Aluminum

7429-90-5
Al
AtW 26.98154, MP 660 C, BP 2327 C, VP 1 mm Hg at 1540 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10068 Blood, serum	32 Ingestion	4.0-12.3 umol/l	>4.0 umol/l	Exposed to Al in drinking water, dialysate, and medication (Al(OH)3). Water supply treated to reduce Al Patients undergoing dialysis At risk for osteomalacia AS
BLOOD SERUM; HEMODIALYSIS; ALUMINUM; UNITED KINGDOM; ADULTS; KIDNEY DISEASES; DRINKING WATER; DRUGS Cannata, J.B.; Briggs, J.D.; Junor, B.J.R.; Fell, G.S. 1983 British Medical Journal 286:1937-1938				

Tissue	Cases Exposure Route	Range	Mean	General Information
10089 Bone	4	2-84 ug/g Wet wt	52 ug/g Wet wt	Bulk analysis 37-62 yr old dialysis patients with osteomalacia. Treated 0-96 mo. AAS
ALUMINUM; BLOOD SERUM; BLOOD; LIVER; IRON; BONE; DRUGS Verbueken, A.H.; Van de Vyver, F.L.; Van Grieken, R.E.; Paulus, G.J.; Visser, W.J.; D'Haese, P.; De Broe, M.E. 1984 Clinical Chemistry 30(5):763-768				

Tissue	Cases Exposure Route	Range	Mean	General Information
10090 Bone	1 Ingestion	Not given	165 mg/kg	6 yr old female with chronic renal failure and neurologic deterioration, taking Al-containing antacids. Normal neurologic function, age 2. Denver, Colorado Encephalopathic syndrome(personality change, dysarthria-apraxia of speech, myoclonus, asterixis, seizures and abnormal electroencephalographic findings including generalized slowing and multifocal spikes) AAS
BLOOD PLASMA; BONE; DELIBERATE EXPOSURE; COLORADO; CHILDREN; KIDNEY DISEASES; ALUMINUM; DRUGS Sedman, A.B.; Wilkening, G.N.; Warady, B.A.; Lum, G.M.; Alfrey, A.C. 1984 Journal of Pediatrics 105(5):836-838				

Tissue	Cases Exposure Route	Range	Mean	General Information
10091 Bone	6	19-76 ug/g Wet wt	Not given	Patients undergoing hemodialysis NA
BONE; BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; HEMODIALYSIS; ALUMINUM; BIOACCUMULATION; BIOLOGICAL MONITORING; HEALTH HAZARDS; METAL POISONING; DRUGS Meulen, J.v.d.; Bezemer, P.D.; Lips, P.; Oe, P.L. 1984 New England Journal of Medicine 311(20):1322				

Aluminum
7429-90-5
Al
AtW 26.98154, MP 660 C, BP 2327 C, VP 1 mm Hg at 1540 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10092 Liver	1	Not applicable	41 ug/g Wet wt	Bulk analysis 37 yr old dialysis patient with osteomalacia. Treated 72 mo. AAS
ALUMINUM; BLOOD SERUM; BLOOD; LIVER; IRON; BONE; DRUGS Verbueken, A.H.; Van de Vyver, F.L.; Van Grieken, R.E.; Paulus, G.J.; Visser, W.J.; D'Haese, P.; De Broe, M.E. 1984 Clinical Chemistry 30(5):763-768				

Aluminum hydroxide (8 CI); Aluminum hydroxide [Al(OH)3] (9 CI)
21645-51-2
Al-H3-O3
MW 77.99, MP 300 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10093 Blood, serum	a) 16 b) 1 c) 7	a) 55.2+/-11.4-59.8+/-10.4 ug/l b) 206-174 ug/l c) Not given	a) Not given b) Not given c) 6.2+/-1.1 ug/l	a) Range of means after 7.9+/-2.1 and 16.6+/-2.3 months of dialysis, taking either Al hydroxide or Al carbonate at mean dosages of 98+/-20 and 104+/-32 mg/kg/d (elemental Al) b) After 7 and 10 months dialysis, taking 310 and 192 mg/kg/d Al from Al hydroxide c) Children with normal renal function, not receiving phosphate binders Levels in a) correlated directly with oral intake and inversely with body weights and ages. Pediatric patients (wt 8.4-39.1 kg) undergoing continuous ambulatory peritoneal dialysis since age 1.5-14.2. Controls Bone biopsy in b) showed evidence of Al-related osteomalacia AAS
BLOOD SERUM; DELIBERATE EXPOSURE; CASE HISTORIES; CHILDREN; BONE DISEASES; KIDNEY DISEASES; METAL POISONING; DRUGS; BIOPSIES; HEMODIALYSIS; ALUMINUM; BIOACCUMULATION; HEALTH HAZARDS; MINERAL METABOLISM Salusky, I.B.; Coburn, J.W.; Paunier, L.; Sherrard, D.J.; Fine, R.N. 1984 Journal of Pediatrics 105(5):717-720				

Ammonium, (o-bromobenzyl)ethyldimethyl-, p-toluenesulfonate (8 CI); Benzenemethanaminium, 2-bromo-N-ethyl-N,N-dimethyl-, salt with 4-methylbenzenesulfonic acid (1:1) (9 CI)
61-75-6
C11-H17-Br-N.C7-H7-O3-S
MW 414.4, MP approx 86 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10004 Blood, plasma	5 Injection	0.80-2.27 ug/ml	1.4 ug/ml	Average maxima after 2 or 4 mg/kg IV at 5 mg/min. Lower dose to patients with creatinine clearance <30 ml/min x 1.73 sq m. Nonobese renally impaired patients, 26-63 yr old GC
10005 Urine	5 Injection	a) 0.1-60.4% of dose b) 0.1-66.5% of dose c) 0.2-68.2% of dose	a) 28.0% of dose b) 37.2% of dose c) 39.1% of dose	a) 24 hr after dose b) 72 hr after dose c) 192 hr after dose Dose: 2 or 4 mg/kg IV at 5 mg/min. Lower dose to patients with creatinine clearance <30 ml/min x 1.73 sq m. Nonobese renally impaired patients, 26-63 yr old GC
ADULTS; KIDNEY DISEASES; BLOOD PLASMA; URINE; DRUGS; COMPARATIVE EVALUATIONS; ANTIARRHYTHMIC AGENTS Josselson, J.; Narang, P.K.; Adir, J.; Yacobi, A.; Sadler, J.H. 1983 Clinical Pharmacology and Therapeutics 33(2):146-150				

Amphotericin B
1397-89-3
C47-H73-N-O17
MW 924.11

Tissue	Cases Exposure Route	Range	Mean	General Information
10006 Blood, plasma	a) 1 b) 1 Injection	a) 0.8-0.26 ug/ml b) 0.1-0.15 ug/ml	a) Not applicable b) Not applicable	a) Normal renal function, 0-24 hr, peak (0.55 ug/ml) at immediately after 6 hr infusion b) Severe renal insufficiency, 0-24 hr, peak (0.58 ug/ml) immediately after 2 hr infusion Dose 10 mg. Patients (1 male, 1 female) with normal and severely impaired renal function HPLC
10007 Urine	5 Injection	<0.5-0.2%	3.4%	% 10 mg dose excreted in 24 hr. Patients with normal (1 male, 1 female) and impaired (2 males, 1 female) renal function, 44-75 yr old HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; AUSTRALIA; INFECTION; KIDNEY DISEASES; ANTIFUNGAL AGENTS; DRUGS; DRUG THERAPY; BIOACCUMULATION Morgan, D.J.; Ching, M.S.; Raymond, K.; Bury, R.W.; Meakford, M.L.; Kong, B.; Sabto, J.; Gurr, F.W.; Somogyi, A.A. 1983 Clinical Pharmacology and Therapeutics 34(2):248-253				

Androstan-3-one, 17-hydroxy-1-methyl-17-propyl-, (1alpha,5alpha,17beta)-
79249-67-7
C23-H38-O2

Tissue	Cases Exposure Route	Range	Mean	General Information
10088 Blood, plasma	2 Dermal	a) 14-16 ng/ml b) 12-16 ng/ml c) 15-20 ng/ml d) 11-12 ng/ml e) Not applicable f) Not applicable g) Not applicable	a) 15+/-1 ng/ml b) 15+/-4 ng/ml c) 18+/-4 ng/ml d) 12+/-1 ng/ml e) 11+/-0 ng/ml f) 0+/-0 ng/ml g) 0+/-0 ng/ml	a) Week 1 b) Week 3 c) Week 4 d) Week 5 e) Week 6 f) Week 7 g) Week 8 Anti-androgen for treatment of acne and seborrhea, applied to total body of volunteers, week 1-6. Sampled at end of each week. Healthy volunteers, 31-40 yr, 70-86 kg GC/MS
MEASUREMENT METHODS; BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS Krause, W.; Jakobs, U. 1984 Journal of Pharmaceutical Sciences 73(4):563-564				

Anthranilic acid, 4-chloro-N-furfuryl-5-sulfamoyl- (8 CI); Bensoic acid, 5-(aminosulfonyl)-4-chloro-2-((2-furanylmethyl)amino)- (9 CI)
54-31-9
C12-H11-Cl-N2-O5-S
MW 330.77, MP 206 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10098 Ascites fluid	1 Injection	Not given	84.6 ng/ml	After 20-40 mg IV. Decompensated cirrhotic patient with intractable ascites HPLC
DIURETICS; DRUGS; DRUG THERAPY; CIRRHOSIS; DELIBERATE EXPOSURE; KIDNEY DISEASES; MEASUREMENT METHODS; BLOOD PLASMA; URINE; ASCITES FLUID Uchino, K.; Isosaki, S.; Saitoh, Y.; Nakagawa, F.; Tamura, Z. 1984 Journal of Chromatography 308:241-249				

Tissue	Cases Exposure Route	Range	Mean	General Information
10100 Blood, plasma	12 Ingestion	a) 21+/-13-1236+/-787 ng/ml b) 24+/-7-780+/-446 ng/ml	a) Not applicable b) Not applicable	a) Brand name tablet, 30.6 mg/tablet b) Generic tablet, 40.3 mg/tablet Administered single tablets 2X, 1 wk apart under controlled conditions, balanced crossover design. Generic gave up to 66% lower plasma levels, 37% less urinary recovery. Healthy males Fluorometry
DELIBERATE EXPOSURE; DRUGS; COMPARATIVE EVALUATIONS; DIURETICS; BIOAVAILABILITY; URINE; BLOOD PLASMA Martin, B.K.; Uihlein, M.; Ings, R.M.J.; Stevens, L.A.; McEwen, J. 1984 Journal of Pharmaceutical Sciences 73(4):437-441				

Anthranilic acid, 4-chloro-N-furfuryl-5-sulfamoyl- (8 CI); Benzoic acid, 5-(aminosulfonyl)-4-chloro-2-((2-furanylmethyl)amino)- (9 CI)
54-31-9
C12-H11-Cl-N2-O5-S
MW 330.77, MP 206 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10101 Blood, plasma	7 Ingestion Injection	a) 30-200 ng/ml b) Not applicable c) Not applicable d) Not applicable	a) Not given b) 830.5 ng/ml c) 351.4 ng/ml d) 5702.0 ng/ml	a) 6 and 12 hr after 40-mg retard capsule, 3 normal volunteers b) Normal volunteers c) Patients with cirrhosis d) Patients with renal disease Specific IV dose levels, times for b)-d) not stated. Normal volunteers and patients HPLC

DIURETICS; DRUGS; DRUG THERAPY; CIRRHOSIS; DELIBERATE EXPOSURE; KIDNEY DISEASES; MEASUREMENT METHODS; BLOOD PLASMA; URINE; ASCITES FLUID
Uchino, K.; Iwasaki, S.; Saitoh, Y.; Nakagawa, F.; Tamura, Z. 1984 Journal of Chromatography 308:241-249

Tissue	Cases Exposure Route	Range	Mean	General Information
10102 Blood, plasma	a) 1 b) 1 c) 14 Injection	a) Not applicable b) Not applicable c) 340-1875 mg/min/l	a) 514 mg/min/l b) 192 mg/min/l c) 610 mg/min/l	a) Control, young subject b) Control, elderly subject c) Elderly patients Area under curve after 40 mg (elderly control received 20 mg). Healthy 32 yr old, 76 yr old with prostate cancer and elderly patients (age 70-93 yr) with heart disease. Wt 37-100 kg HPLC

BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; NETHERLANDS; ADULTS; AGE; HEART DISEASES; KIDNEY DISEASES; DIURETICS; DRUG THERAPY; DRUGS; BIOACCUMULATION; METABOLITES
Kerremans, A.L.M.; Tan, Y.; van Baars, H.; van Ginneken, C.A.M.; Gribnau, F.W.J. 1983 Clinical Pharmacology and Therapeutics 34(2):181-189

Tissue	Cases Exposure Route	Range	Mean	General Information
10103 Blood, serum	6 Ingestion	a) 1230+/-56-7 ng/ml b) 100-15 ng/ml	a) Not applicable b) Not applicable	a) 1-24 hr, peak (1230+/-56 ng/ml) at 1 hr after 40 mg tablets b) 1-24 hr, peak (110+/-10 ng/ml) at 4 hr after 40 mg slow release form. Healthy volunteers, 26-31 yr old RIA

BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; JAPAN; KIDNEY DISEASES; DIURETICS; DRUGS; DRUG THERAPY; BLOOD PRESSURE; BIOACCUMULATION; HYPERTENSION
Ebihara, A.; Tawara, K.; Oka, T. 1983 Drug Research 33(1):163-166

Anthranilic acid, 4-chloro-N-furfuryl-5-sulfamoyl- (8 CI); Benzoic acid, 5-(aminosulfonyl)-4-chloro-2-((2-furanylmethyl)amino)- (9 CI)
54-31-9
C12-H11-Cl-N2-O5-S
MW 330.77, MP 206 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10104 Blood, serum	10 Injection	a) Not given b) Not given c) Not given	a) 426+/-25 ug.min/ml b) 476+/-17 ug.min/ml c) 381+/-31 ug.min/ml	a) 5 nonsmokers, controls b) 5 nonsmokers, phenobarbital pretreatment c) 5 smokers Area under curve, 0-360 min, 40 mg IV, phenobarbital pretreatment was 100 mg/d for 15 d. Healthy volunteers, 18-26 yr old, wt 62-76 kg

BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; CANADA; HEART DISEASES; CARDIOVASCULAR DISEASES; DIURETICS; DRUGS; DRUG THERAPY; DRUG INTERACTION; BIOACCUMULATION
Lambert, C.; Larochelle, P.; du Souich, P. 1983 Clinical Pharmacology and Therapeutics 34(2):170-175

Tissue	Cases Exposure Route	Range	Mean	General Information
10105 Urine				Review. Assessment of various assay methods for parent drug and metabolites used in studies of normal volunteers and kidney transplant patients

URINE; DELIBERATE EXPOSURE; KIDNEY DISEASES; DRUG THERAPY; DRUGS; MEASUREMENT METHODS; REVIEW; SURGERY; METABOLITES
Benet, L.Z.; Smith, D.E.; Lin, E.T.; Vincenti, F.; Gambertoglio, J.G. 1983 Federation Proceedings 42(6):1695-1698

Tissue	Cases Exposure Route	Range	Mean	General Information
10106 Urine	12 Ingestion	a) 0.29+/-0.10-5.13+/-1.95 mg/sample b) 0.33+/-0.14-3.78+/-1.82 mg/sample	a) Not applicable b) Not applicable	a) Brand name tablet, 39.6 mg/tablet b) Generic tablet, 40.3 mg/tablet Administered single tablets 2X, 1 wk apart under controlled conditions, balanced crossover design. Generic gave up to 66% lower plasma levels, 37% less urinary recovery. Healthy males Fluorometry

DELIBERATE EXPOSURE; DRUGS; COMPARATIVE EVALUATIONS; DIURETICS; BIOAVAILABILITY; URINE; BLOOD PLASMA
Martin, B.K.; Uihlein, M.; Inge, R.M.J.; Stevens, L.A.; McEwen, J. 1984 Journal of Pharmaceutical Sciences 73(4):437-441

Tissue	Cases Exposure Route	Range	Mean	General Information
10107 Urine	10 Ingestion Injection	a) 22-40% b) 14-53% c) 14-32%	a) 29+/-4% b) 28+/-12% c) 22+/-6%	a) 20 mg b) 40 mg c) 80 mg % oral doses recovered in 24 hr. Healthy volunteers HPLC

URINE; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; DIURETICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; DRUG INTERACTION
Brater, D.C.; Chennavasin, P.; Day, B.; Burdett, A.; Anderson, S. 1983 Clinical Pharmacology and Therapeutics 34(2):207-213

Anthranilic acid, 4-chloro-N-furfuryl-5-sulfamoyl- (8 CI); Benzoic acid, 5-(aminosulfonyl)-4-chloro-2-((2-furanylmethyl)amino)- (9 CI)
54-31-9
C12-H11-Cl-N2-O4-S
MW 330.77, MP 206 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10108 Urine	a) 10 b) 14 c) 10 d) 14 Injection Ingestion	a) 22-50% b) 51-84% c) 0-10% d) 9-28%	a) 39+/-9% b) 70+/-11% c) Not given d) 17+/-4%	a) % recovery in 24 hr after normal oral dose b) % recovery in 24 hr after 40 mg IV c) Glucuronide metabolite, % recovery in 24 hr after oral d) Glucuronide metabolite, % recovery in 24 hr after 40 mg IV. Healthy 32 yr old, 76 yr old with prostate cancer and elderly patients (age 70-93 yr) with heart disease. Wt 37-100 kg HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; NETHERLANDS; ADULTS; AGE; HEART DISEASES; KIDNEY DISEASES; DIURETICS; DRUG THERAPY; DRUGS; BIOACCUMULATION; METABOLITES Kerremans, A.L.M.; Tan, Y.; van Baare, H.; van Ginneken, C.A.M.; Gribnau, F.W.J. 1983 Clinical Pharmacology and Therapeutics 34(2):181-189				

Tissue	Cases Exposure Route	Range	Mean	General Information
10109 Urine	3 Ingestion	Not applicable	8 mg	Samples during 24 hr after 40 mg as a retard capsule. Normal volunteers HPLC
DIURETICS; DRUGS; DRUG THERAPY; CIRRHOSIS; DELIBERATE EXPOSURE; KIDNEY DISEASES; MEASUREMENT METHODS; BLOOD PLASMA; URINE; ASCITES FLUID Uchino, K.; Isezaki, S.; Saitoh, Y.; Nakagawa, F.; Tamura, Z. 1984 Journal of Chromatography 308:241-249				

Antipyrine (8 CI); 3H-Pyrazol-3-one, 1,2-dihydro-1,5-dimethyl-2-phenyl- (9 CI)
60-80-0
C11-H12-N2-O
MW 188.22, MP 111-113 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10110 Blood, plasma	10 Injection	a) 80-5 ug/ml b) 80-5 ug/ml	a) Not given b) Not given	a) At end of, and 24 hr after 1.2 gm IV b) 5 min and 24 hr after 1.2 gm IV during concurrent oral administration of 150 mg/12 hr ranitidine Crossover study. Range of levels shown for only one subject. No significant effect of ranitidine on human antipyrine oxidation. Some values estimated from figure. Healthy 21-45 yr old subjects LC
BLOOD PLASMA; DELIBERATE EXPOSURE; ANTIPYRETICS; TRANQUILIZERS; DRUG INTERACTION; DRUGS; METABOLISM; METABOLITES Abernethy, D.R.; Greenblatt, D.J; Ehrelman, F.N.; Shader, R.I. 1984 Clinical Pharmacology and Therapeutics 35(2):188-192				

Antipyrine (8 CI); 3H-Pyrazol-3-one, 1,2-dihydro-1,5-dimethyl-2-phenyl- (9 CI)
60-80-0
C11-H12-N2-O
MW 188.22, MP 111-113 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10111 Urine	a) 4 b) 4 c) 1 d) 1 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) Not detectable b) 25.6+/-2.6% c) 1.5% d) 24.5%	a) Norantipyrine sulphate metabolite, selective acid hydrolysis b) Norantipyrine glucuronide metabolite, selective acid hydrolysis c) Norantipyrine sulphate metabolite, liquid scintillation d) Norantipyrine glucuronide metabolite, liquid scintillation Dose 1200 mg with C-14 label in c), d). Healthy volunteers, mean age 31 yr, wt 62-80 kg TLC
URINE; DELIBERATE EXPOSURE; GERMANY; ADULTS; BIOACCUMULATION; DRUGS; DRUG THERAPY Bottcher, J.; Bassmann, H.; Schuppel, R. 1984 Journal of Pharmacy and Pharmacology 36:301-306				

Arsenic
7440-38-2
As
AtW 74.9216, MP 817 C at 26 atm, BP 613 C (sublimes), VP 1 mm Hg at 380 C, 10 mm Hg at 440 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10112 Blood	2	0.4-1.5 ug/dl	0.9 ug/dl	Single-drug deaths, 1975-1980. Autopsy, Maryland State Medical Examiners office. Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1985 Journal of Analytical Toxicology 7:228-230				

Barbituric acid, 5-(1-cyclohexen-1-yl)-1,5-dimethyl- (8 CI) (VAN); 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-(1-cyclohexen-1-yl)-1,5-dimethyl- (9 CI)
56-29-1
C12-H16-N2-O3
MW 236.26, MP 145-147 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10113 Blood, plasma	6 Ingestion	4.9-10.9 ug/ml	7.1+/-2.1 ug/ml	Peak at 1.2+/-0.4 hr after 500 mg. Healthy volunteers, 21-29 yr old, wt 69-77 kg GC
10114 Urine	6 Ingestion	a) 3.2-6.8% b) 17.7-46.6% c) 8.0-31.3% d) 28.9-70.8%	a) 4.7+/-1.3% b) 32.1+/-11.9% c) 18.0+/-7.8% d) 54.7+/-16.1%	a) 5'-Hydroxy metabolite b) 5'-Keto metabolite c) 1,5-Dimethyl barbituric acid metabolite d) Total excretion of metabolites % 500 mg dose excreted in 24 hr. Healthy volunteers, 21-29 yr old, wt 69-77 kg GC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; NETHERLANDS; ADULTS; BEHAVIOR DISORDERS; ANESTHETICS; DRUG THERAPY; DRUGS; MEASUREMENT METHODS; BIOACCUMULATION; METABOLISM; METABOLITES; BIOINDICATORS Vermeulen, N.P.E.; Rietveld, C.T.; Breimer, D.D. 1983 British Journal of Clinical Pharmacology 15:459-464				

Barbituric acid, 5-allyl-1-methyl-5-(1-methyl-2-pentynyl)- (8 CI); 2,4,6(1H,3H,5H)-Pyrimidinetrione, 1-methyl-5-(1-methyl-2-pentynyl)-5-(2-propenyl)- (9 CI)
151-83-7
C14-H16-N2-O3

Tissue	Cases Exposure Route	Range	Mean	General Information
10115 Blood, plasma		3-0.1 ug/ml	Not applicable	0-240 min, peak (2 ug/ml) 5 min after 1.15 mg as sodium salt IV. New assay. Patients undergoing minor orthopedic surgery HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; SWEDEN; ANESTHETICS; MEASUREMENT METHODS; BIOACCUMULATION; DRUG THERAPY; DRUGS; SURGERY Bjorkman, S.; Idvall, J. 1984 Journal of Chromatography 307:481-487				

Barbituric acid, 5-allyl-5-(1-methylbutyl)- (8 CI); 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-(1-methylbutyl)-5-(2-propenyl)- (9 CI)
76-73-8
C12-H16-N2-O3
MW 236

Tissue	Cases Exposure Route	Range	Mean	General Information
10116 Blood	7	1-28 mg/L	12 mg/L	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths UV
VITREOUS HUMOR; BLOOD; BRAIN; LIVER; KIDNEYS; BILE; URINE; AUTOPSIES; NARCOTICS; DRUG ABUSE; SEDATIVES; FORENSIC MEDICINE; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; DRUGS; DELIBERATE EXPOSURE Siminski, K.R.; Wemyss, C.T.; Bidanset, J.H.; Manning, T.J.; Lukash, L. 1984 Journal of Forensic Sciences 29(3):903-909				

Tissue	Cases Exposure Route	Range	Mean	General Information
10117 Blood	a) 16 b) 13 c) 10 d) 7 e) 9	a) 6.2-37 mg/l b) 1.3-21 mg/l c) 1.9-26 mg/l d) 6.2-37 mg/l e) 6.0-21 mg/l	a) 17.6 mg/l b) 5.5 mg/l c) 13.7+/-8.6 mg/l d) 16.4 mg/l e) 10.5 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths, 1975-1980 d) Single-drug deaths, without ethanol, 1975-1980 e) Single-drug deaths, with ethanol, 1975-1980. Autopsy, Maryland State Medical Examiners office. Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:226-230				

Barbituric acid, 5-allyl-5-(1-methylbutyl)- (8 CI); 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-(1-methylbutyl)-5-(2-propenyl)- (9 CI)
76-73-3
C12-H18-N2-O3
MW 254

Tissue	Cases Exposure Route	Range	Mean	General Information
10118 Blood, plasma	12 Ingestion	a) 5.94-10.08 ug/ml b) 5.69-13.16 ug/ml c) 4.16-7.81 ug/ml d) 4.06-10.26 ug/ml e) 3.13-6.40 ug/ml	a) 7.30+/-0.56 ug/ml b) 8.01+/-1.12 ug/ml c) 5.76+/-0.40 ug/ml d) 6.53+/-0.84 ug/ml e) 4.68+/-0.47 ug/ml	a) Day 1, peak 1.83+/-0.17 hr after dose, 6 cases b) Day 2, peak 1.55+/-0.22 hr after dose and concurrent 19.2 g ethanol, 6 cases c) Day 3, peak 1.83+/-0.17 hr after dose and 19.2 g ethanol 2 hr after dose, 6 cases d) Peak 1.76+/-0.33 hr after dose, 6 cases e) With blood ethanol level 800-1000 mg/ml, peak 2.00+/-0.64 hr after dose, 6 cases Dose 300 mg. Short term ethanol dosing did not affect disposition. Volunteers, 6 males, 1 female, 30-31 yr old, 67-68 kg (means). HPLC

BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; CANADA; LIVER DISEASES; DRUGS; DRUG THERAPY; HYPERTHYROIDISM; ALCOHOLIC BEVERAGES; BIOACCUMULATION
Long, J.P.; Giles, H.G.; Bennett, J.; Dorian, P.; Thiessen, J.J.; Orrego, H.; Sellers, E.M. 1983 Clinical Pharmacology and Therapeutics 33(5):663-667

Tissue	Cases Exposure Route	Range	Mean	General Information
10119 Blood, plasma	3 Ingestion	a) Not given b) Not given c) Not given	a) 0.32+/-0.17 ug/ml b) 0.57+/-0.15 ug/ml c) 0.74+/-0.14 ug/ml	a) 1 hr b) 2 hr c) 3 hr After 50 mg as sodium salt. Healthy volunteers, 21-30 yr old, 11 males, 3 females. GC

SALIVA; BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; CANADA; DRUGS; SEDATIVES; BENZODIAZEPINES; ANTIHISTAMINES; NARCOTICS; ANALGESICS; FORENSIC MEDICINE; DIAZEPAMS; BIOACCUMULATION
Sharp, M.E.; Wallace S.M.; Hindmarsh, K.W.; Peel, H.W. 1983 Journal of Analytical Toxicology 7:11-14

Tissue	Cases Exposure Route	Range	Mean	General Information
10120 Brain	7	1-25 mg/kg	13 mg/kg	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths UV
10121 Kidney	7	3-30 mg/kg	16 mg/kg	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths UV

VITREOUS HUMOR; BLOOD; BRAIN; LIVER; KIDNEYS; BILE; URINE; AUTOPSIES; NARCOTICS; DRUG ABUSE; SEDATIVES; FORENSIC MEDICINE; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; DRUGS; DELIBERATE EXPOSURE
Ziminski, K.R.; Wemyss, C.T.; Bidanset, J.H.; Manning, T.J.; Lukash, L. 1984 Journal of Forensic Sciences 29(3):903-909

Barbituric acid, 5-allyl-5-(1-methylbutyl)- (8 CI); 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-(1-methylbutyl)-5-(2-propenyl)- (9 CI)
76-73-8
C12-H18-N2-O3
MW 334

Tissue	Cases Exposure Route	Range	Mean	General Information
10122 Liver		a) 100-97+/-16 b) 100-91+/-12	a) Not applicable b) Not applicable	a) % original concentration at 0 and 2 months, 25 deg C storage b) % original concentration at 0 and 2 months, 4 deg C storage >75% of original barbituate levels remained after 2 mo storage. For forensic purposes, barbituates are stable. Autopsy Specimens GC
LIVER; CONSUMER EXPOSURE; LIVER DISEASES; SEDATIVES; NARCOTICS; DRUG ABUSE; FORENSIC MEDICINE; AUTOPSIES; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; DRUGS Levine, B.S.; Blanke, R.V.; Valentour, J.C. 1984 Journal of Forensic Sciences 29(1):131-138				

Tissue	Cases Exposure Route	Range	Mean	General Information
10123 Liver	7	2-50 mg/kg	30 mg/kg	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths UV
VITREOUS HUMOR; BLOOD; BRAIN; LIVER; KIDNEYS; BILE; URINE; AUTOPSIES; NARCOTICS; DRUG ABUSE; SEDATIVES; FORENSIC MEDICINE; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; DRUGS; DELIBERATE EXPOSURE Zimlanki, K.R.; Wemyss, C.T.; Bidanset, J.H.; Manning, T.J.; Lukash, L. 1984 Journal of Forensic Sciences 29(3):903-909				

Tissue	Cases Exposure Route	Range	Mean	General Information
10124 Saliva	5 Ingestion	a) Not given b) Not given c) Not given	a) 0.09+/-0.04 ug/ml b) 0.17+/-0.04 ug/ml c) 0.21+/-0.04 ug/ml	a) 1 hr b) 2 hr c) 3 hr After 50 mg as sodium salt. Healthy volunteers, 21-30 yr old, 11 males, 3 females. GC
SALIVA; BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; CANADA; DRUGS; SEDATIVES; BENZODIAZEPINES; ANTIHISTAMINES; NARCOTICS; ANALGESICS; FORENSIC MEDICINE; DIAZEPAMS; BIOACCUMULATION Sharp, M.E.; Wallace S.M.; Hindmarsh, K.W.; Peel, H.W. 1983 Journal of Analytical Toxicology 7:11-14				

Barbituric acid, 5-allyl-5-(1-methylbutyl)- (8 CI); 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-(1-methylbutyl)-5-(2-propenyl)- (9 CI)
76-73-3
C12-H18-N2-O3
MW 334

Tissue	Cases Exposure Route	Range	Mean	General Information
10125 Vitreous humor	7	2-10 mg/L	4 mg/L	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths UV
VITREOUS HUMOR; BLOOD; BRAIN; LIVER; KIDNEYS; BILE; URINE; AUTOPSIES; NARCOTICS; DRUG ABUSE; SEDATIVES; FORENSIC MEDICINE; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; DRUGS; DELIBERATE EXPOSURE Zimiuski, K.R.; Wemyss, C.T.; Bidanset, J.H.; Manning, T.J.; Lukash, L. 1984 Journal of Forensic Sciences 29(3):903-909				

Barbituric acid, 5-allyl-5-isobutyl- (8 CI); 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-(2-methylpropyl)-5-(2-propenyl)- (9 CI)
77-26-9
C11-H16-N2-O3
MW 224.3, MP 137-140 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10126 Blood	5	1.0-2.3 mg/L	Not given	Drivers involved in single-car accidents who were killed in crash or lived less than 1 hr and received no vigorous medical tratment, with blood ethanol levels >1.0 mg/L. Blood ethanol >0.3 g/L in 4 of these. Additional data in article. 43.1+/-16.1 yr olds, vehicle fatalities, 1976-1981, NC RIA
BLOOD; NORTH CAROLINA; AUTOPSIES; DRUGS; DRUG ABUSE; DRUG INTERACTION; PSYCHOTROPIC DRUGS; SEDATIVES; HYPNOTICS; ANTICONVULSANTS; FORENSIC MEDICINE; ALCOHOLS; DELIBERATE EXPOSURE Mason, A.P.; McBay, A.J. 1984 Journal of Forensic Sciences 29(4):967-1026				

Tissue	Cases Exposure Route	Range	Mean	General Information
10127 Blood	a) 3 b) 6 c) 3	a) 1.0-3.1 mg/l b) 1.6-22 mg/l c) 2.9-21 mg/l	a) 13.6 mg/l b) 7.1 mg/l c) 12.0+/-9.2 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths, 1979-1980. Autopsy, Maryland State Medical Examiners office. Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooke, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Barbituric acid, 5-butyl-5-ethyl- (8 CI); 2,4,6-(1H,3H,5H)-Pyrimidinetrione, 5-butyl-5-ethyl- (9 CI);
77-28-1
C10-H16-N2-O3
MW 212.24, MP 124-127 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10128 Urine	3 Ingestion	a) 5.2-7.0% b) 28.1-40.1% c) 2.5-9.2% d) 0.7-0.95% e) 1.4-5.0%	a) 6.2% b) 33.9% c) 4.8% d) 0.85% e) 2.7%	a) Parent drug b) 3'-hydroxy-form c) 3'-oxo-form d) 4'-hydroxy-form e) W-acid-form % recovery of single dose (100 or 200 mg) in 96 hr. Healthy volunteers GLC/MS
URINE; DELIBERATE EXPOSURE; ADULTS; SEDATIVES; DRUG ABUSE; DRUGS; DRUG THERAPY; BIOACCUMULATION; METABOLISM; METABOLITES Al Sharif, M.A.; Gilbert, J.N.T.; Powell, J.W. 1983 Xenobiotica 13(3):179-183				

Barbituric acid, 5-ethyl-5-(1-methylbutyl)- (8 CI); 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-ethyl-5-(1-methylbutyl)- (9 CI)
76-74-4
C11-H18-N2-O3
MW 226.31

Tissue	Cases Exposure Route	Range	Mean	General Information
10129 Blood	7	3-41 mg/L	19 mg/L	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths UV
VITREOUS HUMOR; BLOOD; BRAIN; LIVER; KIDNEYS; BILE; URINE; AUTOPSIES; NARCOTICS; DRUG ABUSE; SEDATIVES; FORENSIC MEDICINE; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; DRUGS; DELIBERATE EXPOSURE Zieminski, K.R.; Wemyss, C.T.; Bidanset, J.H.; Manning, T.J.; Lukash, L. 1984 Journal of Forensic Sciences 29(3):903-909				

Tissue	Cases Exposure Route	Range	Mean	General Information
10130 Blood	a) 27 b) 15 c) 4 d) 16 e) 11	a) 3.0-49 mg/l b) 1.6-60 mg/l c) 4.6-82 mg/l d) 8.1-40 mg/l e) 3.0-25 mg/l	a) 16.3 mg/l b) 12.3 mg/l c) 32.0+/-36.2 mg/l d) 19.5 mg/l e) 11.8 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths, 1979-1980 d) Single-drug deaths, without ethanol, 1975-1980 e) Single-drug deaths, with ethanol, 1975-1980. Autopsy, Maryland State Medical Examiners office. Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooke, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Barbituric acid, 5-ethyl-5-(1-methylbutyl)- (8 CI); 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-ethyl-5-(1-methylbutyl)- (9 CI)
76-74-4
C11-H18-N2-O3
MW 226.31

Tissue	Cases Exposure Route	Range	Mean	General Information
10131 Blood, serum	26	a) 3-56 ug/ml b) <4 ug/ml	a) 19 ug/ml b) 1.4 ug/ml	a) Pentobarbital b) Metabolites 3'-hydroxypentobarbital High dose pentobarbital, amount not stated. Patients HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; DRUGS; DRUG THERAPY; COMPARATIVE EVALUATIONS; MEASUREMENT METHODS; SEDATIVES; HYPNOTICS; METABOLITES Cary, P.L.; Pape, B.E. 1983 Journal of Chromatography 275:107-114				

Tissue	Cases Exposure Route	Range	Mean	General Information
10132 Brain	7	4-48 mg/kg	18 mg/kg	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths UV
10133 Kidney	7	7-64 mg/kg	27 mg/kg	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths UV
10134 Liver	7	8-96 mg/kg	38 mg/kg	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths UV
VITREOUS HUMOR; BLOOD; BRAIN; LIVER; KIDNEYS; BILE; URINE; AUTOPSIES; NARCOTICS; DRUG ABUSE; SEDATIVES; FORENSIC MEDICINE; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; DRUGS; DELIBERATE EXPOSURE Elmishi, K.R.; Wemyss, C.T.; Bidaaset, J.H.; Manning, T.J.; Lukash, L. 1984 Journal of Forensic Sciences 29(3):903-909				

Tissue	Cases Exposure Route	Range	Mean	General Information
10135 Liver		a) 100-100% b) 100-100%	a) Not applicable b) Not applicable	a) % original concentration at 0 and 2 months, 25 deg C storage b) % original concentration at 0 and 2 months, 4 deg C storage >75% of original barbituate levels remained after 2 mo storage. For forensic purposes, barbituates are stable. Autopsy specimens GC
LIVER; CONSUMER EXPOSURE; LIVER DISEASES; SEDATIVES; NARCOTICS; DRUG ABUSE; FORENSIC MEDICINE; AUTOPSIES; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; DRUGS Levine, B.S.; Blanke, R.V.; Valentour, J.C. 1984 Journal of Forensic Sciences 29(1):131-136				

Barbituric acid, 5-ethyl-5-(1-methylbutyl)- (8 CI); 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-ethyl-5-(1-methylbutyl)- (9 CI)
76-74-4
C11-H18-N2-O3
MW 226.81

Tissue	Cases Exposure Route	Range	Mean	General Information
10136 Urine	3 Ingestion	a) 0.6-2.8% b) 28.3-40.2% c) 7.3-13.5% d) 0.4-1.0% e) 7.4-13.9%	a) 1.5% b) 34.1% c) 9.0% d) 0.6% e) 9.8%	a) Parent drug b) 5'-hydroxy-form c) 5'-oxo-form d) 4'-hydroxy-form e) W-acid-form % recovery of single (200 mg) or multiple (150 or 200 mg) dose in 96 hr. Healthy volunteers GLC/MS
URINE; DELIBERATE EXPOSURE; ADULTS; SEDATIVES; DRUG ABUSE; DRUGS; DRUG THERAPY; BIOACCUMULATION; METABOLISM; METABOLITES Al Sharif, M.A.; Gilbert, J.N.T.; Powell, J.W. 1983 Xenobiotica 13(3):179-183				

Tissue	Cases Exposure Route	Range	Mean	General Information
10137 Vitreous humor	7	7-27 mg/L	15 mg/L	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths UV
VITREOUS HUMOR; BLOOD; BRAIN; LIVER; KIDNEYS; BILE; URINE; AUTOPSIES; NARCOTICS; DRUG ABUSE; SEDATIVES; FORENSIC MEDICINE; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; DRUGS; DELIBERATE EXPOSURE Zumwalt, K.R.; Wemyss, G.T.; Bidanset, J.H.; Manning, T.J.; Lukash, L. 1984 Journal of Forensic Sciences 29(3):905-909				

Barbituric acid, 5-ethyl-5-isopentyl- (8 CI); 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-ethyl-5-(3-methylbutyl)- (9 CI)
57-43-2
C11-H18-N2-O3
MW 226.27, MP 154-156 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10138 Blood	1	Not applicable	10 mg/L	Samples after death from multiple drug intoxication. Dose not state. Had taken 2 chlorpromazine tablets before going to bed. Additional drugs measured were amobarbital and ethchlorvynol. 32 yr old white male, 1.6 m, 111 kg, depressed but not suicidal. Past drug abuse. Used phentermine to lose wt GC
DELIBERATE EXPOSURE; AUTOPSIES; BLOOD; URINE; LIVER; KIDNEYS; DRUGS Levine, B.; Caplan, Y.H.; Dixon, A.M. 1984 Journal of Forensic Sciences 29(4):1243-1245				

Barbituric acid, 5-ethyl-5-isopentyl- (8 CI); 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-ethyl-5-(3-methylbutyl)- (9 CI)
57-43-2
C11-H18-N2-O3
MW 226.27, MP 156-158 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10139 Blood	2	6-26 mg/L	17 mg/L	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths UV
VITREOUS HUMOR; BLOOD; BRAIN; LIVER; KIDNEYS; BILE; URINE; AUTOPSIES; NARCOTICS; DRUG ABUSE; SEDATIVES; FORENSIC MEDICINE; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; DRUGS; DELIBERATE EXPOSURE Eliminshi, K.R.; Wemyss, C.T.; Bidanset, J.H.; Manning, T.J.; Lukash, L. 1984 Journal of Forensic Sciences 29(3):905-909				

Tissue	Cases Exposure Route	Range	Mean	General Information
10140 Blood	a) 4 b) 11 c) 6	a) 25.5-76.5 mg/l b) 1.1-6.4 mg/l c) 1.5-30 mg/l	a) 41.0 mg/l b) 4.2 mg/l c) 12.0+/-9.8 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths, 1975-1980. Autopsy, Maryland State Medical Examiners office. Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Tissue	Cases Exposure Route	Range	Mean	General Information
10141 Brain	2	11-24 mg/kg	17 mg/kg	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths UV
10142 Kidney	2	10-30 mg/kg	20 mg/kg	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths UV
VITREOUS HUMOR; BLOOD; BRAIN; LIVER; KIDNEYS; BILE; URINE; AUTOPSIES; NARCOTICS; DRUG ABUSE; SEDATIVES; FORENSIC MEDICINE; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; DRUGS; DELIBERATE EXPOSURE Eliminshi, K.R.; Wemyss, C.T.; Bidanset, J.H.; Manning, T.J.; Lukash, L. 1984 Journal of Forensic Sciences 29(3):905-909				

Barbituric acid, 5-ethyl-5-isopentyl- (8 CI); 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-ethyl-5-(3-methylbutyl)- (9 CI)
57-43-2
C11-H18-N2-O3
MW 226.27, MP 156-158 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10143 Liver		a) 100-77+/-5% b) 100-76+/-5%	a) Not applicable b) Not applicable	a) % original concentration at 0 and 2 months, 25 deg C storage b) % original concentration at 0 and 2 months, 4 deg C storage >75% of original barbituate levels remained after 2 mo storage. For forensic purposes, barbituates are stable. Autopsy Specimens GC
LIVER; CONSUMER EXPOSURE; LIVER DISEASES; SEDATIVES; NARCOTICS; DRUG ABUSE; FORENSIC MEDICINE; AUTOPSIES; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; DRUGS Levine, B.S.; Blanke, R.V.; Valentour, J.C. 1984 Journal of Forensic Sciences 29(1):151-156				

Tissue	Cases Exposure Route	Range	Mean	General Information
10144 Liver	2	10-50 mg/kg	35 mg/kg	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths UV
10145 Vitreous humor	2	8-26 mg/L	17 mg/L	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths UV
VITREOUS HUMOR; BLOOD; BRAIN; LIVER; KIDNEYS; BILE; URINE; AUTOPSIES; NARCOTICS; DRUG ABUSE; SEDATIVES; FORENSIC MEDICINE; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; DRUGS; DELIBERATE EXPOSURE Siminski, K.R.; Wemyss, C.T.; Bidanset, J.H.; Manning, T.J.; Lukash, L. 1984 Journal of Forensic Sciences 29(3):903-909				

Barbituric acid, 5-ethyl-5-phenyl- (8 CI); 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-ethyl-5-phenyl- (9 CI)
50-06-6
C12-H12-N2-O3
MW 232.23, MP 174-178 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10146 Blood	18	1.0-39 mg/L	Not given	Drivers involved in single-car accidents who were killed in crash or lived less than 1 hr and received no vigorous medical tratment, with blood ethanol levels >1.0 mg/L. Blood ethanol >0.3 g/L in 7 of these. Additional data in article. 43.1+/-16.1 yr old males, vehicle fatalities, 1978-1981, NC RIA
BLOOD; NORTH CAROLINA; AUTOPSIES; DRUGS; DRUG ABUSE; DRUG INTERACTION; PSYCHOTROPIC DRUGS; SEDATIVES; HYPNOTICS; ANTICONVULSANTS; FORENSIC MEDICINE; ALCOHOLS; DELIBERATE EXPOSURE Mason, A.P.; McBay, A.J. 1984 Journal of Forensic Sciences 29(4):967-1026				

Barbituric acid, 5-ethyl-5-phenyl- (8 CI); 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-ethyl-5-phenyl- (9 CI)
50-06-6
C12-H12-N2-O3
MW 232.23, MP 174-178 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10147 Blood	6	4-25 mg/L	16 mg/L	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths UV

VITREOUS HUMOR; BLOOD; BRAIN; LIVER; KIDNEYS; BILE; URINE; AUTOPSIES; NARCOTICS; DRUG ABUSE; SEDATIVES; FORENSIC MEDICINE; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; DRUGS; DELIBERATE EXPOSURE
Siminski, K.R.; Wemyss, C.T.; Bidanset, J.H.; Manning, T.J.; Lukash, L. 1984 Journal of Forensic Sciences 29(3):903-909

Tissue	Cases Exposure Route	Range	Mean	General Information
10148 Blood	32	a) 15-20 mg/l b) 10.5-19.5 mg/l c) 8.8-25.6 mg/l	a) 17.6+/-1.6 mg/l b) 14.4+/-3.1 mg/l c) 17.1+/-6.6 mg/l	a) 24 hr after 20 mg/kg IV, 11 cases b) 120 hr after 20 mg/kg IV, 15 cases c) 24 hr after 25 mg/kg IV, 6 cases Steady-state. Newborns with respiratory difficulties and convulsions Immunological

BLOOD; CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; FRANCE; NEWBORN; NEUROLOGIC MANIFESTATIONS; ANTICONVULSANTS; DRUG THERAPY; DRUGS; BIOACCUMULATION
Bourin, M.; Mouzard, A.; Kergueris, M.F.; Alix, D.; Riche, C.; Le Normand, Y.; Larousse, C. 1983 Therapie 38:47-51

Tissue	Cases Exposure Route	Range	Mean	General Information
10149 Blood	a) 9 b) 193 c) 8 d) 5 e) 4	a) 3.5-130 mg/l b) 1.3-98 mg/l c) 2.3-120 mg/l d) 61-130 mg/l e) 3.5-67 mg/l	a) 69.0 mg/l b) 9.5 mg/l c) 40.5+/-37.4 mg/l d) 100 mg/l e) 29.9 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths, 1979-1980 d) Single-drug deaths, without ethanol, 1975-1980 e) Single-drug deaths, with ethanol, 1975-1980. Autopsy, Maryland State Medical Examiners office. Death

BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS
Caplan, Y.H.; Ottinger, W.E.; Crooke, C.R. 1983 Journal of Analytical Toxicology 7:225-230

Barbituric acid, 5-ethyl-5-phenyl- (8 CI); 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-ethyl-5-phenyl- (9 CI)
50-06-6
C12-H12-N2-O3
MW 232.23, MP 174-178 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10150 Blood, plasma	24 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 3.01+/-16 ug/ml b) 2.44+/-16 mg/ml c) 2.70+/-28 mg/ml d) 3.15+/-17 ug/ml e) 2.57+/-22 ug/ml f) 2.69+/-14 ug/ml	a) Group I, product 1, at 1.0 hr b) Group I, product 2, at 8.6 hr c) Group I, product 3, at 2.6 hr d) Group II, product 1, at 1.0 hr e) Group II, product 4, at 3.2 hr f) Group II, product 5, at 4.2 hr Group I, 12 subjects. Group II, 12 subjects. Fasting, no other drugs. Peaks. Product 1, 100 mg as elixir. Products 2, 3, 4, and 5 were tablets from different manufacturers, 97.2-100 mg dose. Single dose tests separated by 30 d. Rates of absorption significantly different for different products. Healthy volunteers, 28-30 yr 53-100 kg HPLC

BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; SEDATIVES; COMPARATIVE EVALUATIONS; BIOAVAILABILITY; IN VITRO ANALYSIS; IN VIVO ANALYSIS; NARCOTICS
Meyer, M.C.; Straughn, A.B.; Raghow, G.; Schary, W.L.; Rotenberg, K.S. 1984 Journal of Pharmaceutical Sciences 73(4):485-489

Tissue	Cases Exposure Route	Range	Mean	General Information
10151 Blood, serum	10 Lavage	a) 86-164 mg/l b) 69-100 mg/l c) 84-164 mg/l d) 22-60 mg/l	a) 121+/-31 mg/l b) 83+/-13 mg/l c) 132+/-26 mg/l d) 48+/-16 mg/l	a) 5 patients at 0 hr, therapy single dose 50 g activated charcoal b) At extubation c) 5 patients at 0 hr, therapy 50 g charcoal + 17g/4 hr until extubation d) At extubation. Significant increase in elimination rate compared to b). Comatose 20-48 yr olds, wt 52-74 kg, history of possible overdose and/or serum levels >60 mg/L. Admitted to San Francisco General Hospital, CA LC

BLOOD SERUM; DELIBERATE EXPOSURE; DRUG ABUSE; DRUGS; LAVAGE; CALIFORNIA; NARCOTICS
Pond, S.M.; Olson, K.R.; Osterloh, J.D.; Tong, T.G. 1984 Journal of the American Medical Association 251:(23):3104-3108

Tissue	Cases Exposure Route	Range	Mean	General Information
10152 Blood, serum	5	a) 46-89 umol/l b) 41-81 umol/l	a) 66.8 umol/l b) 65.6 umol/l	a) Day 56. Concomitant with 13.7 mg/kg carbamazepine in 3 doses/d wk 1-4, and 2/d wk 5-8 b) Day 84. With carbamazepine 1X/d during wk 9-12 Ranges of means at 7-8 hr, before medication. Each patients daily dose (not stated) unaltered during 12 wk study. Total daily carbamazepine constant. 16-18 yr old epileptics

BLOOD SERUM; DELIBERATE EXPOSURE; CENTRAL NERVOUS SYSTEM DISEASES; ANTICONVULSANTS; DRUG INTERACTION; DRUG THERAPY; DRUGS; COMPARATIVE EVALUATIONS; METABOLISM; METABOLITES
Ghose, K.; Fry, D.E.; Christidder, J.A. 1983 European Journal of Clinical Pharmacology 24:375-381

Barbituric acid, 5-ethyl-5-phenyl- (8 CI); 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-ethyl-5-phenyl- (9 CI)
50-06-6
C12-H12-N2-O3
MW 232.23, MP 174-176 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10153 Blood, serum	5 Ingestion	6.50-9.32 ug/ml	7.34 ug/ml	Nonsmokers, 10 hr after last dose of 100 mg/d for 15 d. Healthy volunteers, 18-26 yr old, wt 62-76 kg
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; CANADA; HEART DISEASES; CARDIOVASCULAR DISEASES; DIURETICS; DRUGS; DRUG THERAPY; DRUG INTERACTION; BIOACCUMULATION Lambert, C.; Larochelle, P.; du Souich, P. 1983 Clinical Pharmacology and Therapeutics 34(2):170-175				

Tissue	Cases Exposure Route	Range	Mean	General Information
10154 Brain	4	5-27 mg/kg	15 mg/kg	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths UV
VITREOUS HUMOR; BLOOD; BRAIN; LIVER; KIDNEYS; BILE; URINE; AUTOPSIES; NARCOTICS; DRUG ABUSE; SEDATIVES; FORENSIC MEDICINE; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; DRUGS; DELIBERATE EXPOSURE Siminski, K.R.; Wemyss, C.T.; Bidanset, J.H.; Manning, T.J.; Lukash, L. 1984 Journal of Forensic Sciences 29(3):903-909				

Tissue	Cases Exposure Route	Range	Mean	General Information
10155 Cerebrospinal fluid	32	a) 10.5-16 mg/l b) 7.5-13.5 mg/l c) 4.2-20.7 mg/l	a) 13.8+/-1.9 mg/l b) 10.2+/-2.7 mg/l c) 13.0+/-6.2 mg/l	a) 24 hr after 20 mg/kg IV, 11 cases b) 120 hr after 20 mg/kg IV, 12 cases c) 24 hr after 25 mg/kg IV, 8 cases Steady-state. Newborns with respiratory difficulties and convulsions Immunological
BLOOD; CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; FRANCE; NEWBORN; NEUROLOGIC MANIFESTATIONS; ANTICONVULSANTS; DRUG THERAPY; DRUGS; BIOACCUMULATION Bourin, M.; Mouzard, A.; Kergueris, M.F.; Alix, D.; Riche, C.; Le Normand, Y.; Larousse, C. 1983 Therapie 38:47-51				

Tissue	Cases Exposure Route	Range	Mean	General Information
10156 Kidney	2	15-26 mg/kg	21 mg/kg	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths UV
VITREOUS HUMOR; BLOOD; BRAIN; LIVER; KIDNEYS; BILE; URINE; AUTOPSIES; NARCOTICS; DRUG ABUSE; SEDATIVES; FORENSIC MEDICINE; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; DRUGS; DELIBERATE EXPOSURE Siminski, K.R.; Wemyss, C.T.; Bidanset, J.H.; Manning, T.J.; Lukash, L. 1984 Journal of Forensic Sciences 29(3):903-909				

Barbituric acid, 5-ethyl-5-phenyl- (8 CI); 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-ethyl-5-phenyl- (9 CI)
50-06-6
C12-H12-N2-O3
MW 232.23, MP 174-176 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10157 Liver		a) 100-90+/-6% b) 100-86+/-10%	a) Not applicable b) Not applicable	a) % original concentration at 0 and 2 months, 25 deg C storage b) % original concentration at 0 and 2 months, 4 deg C storage >75% of original barbituate levels remained after 2 mo storage. For forensic purposes, barbituates are stable. Autopsy Specimens GC
LIVER; CONSUMER EXPOSURE; LIVER DISEASES; SEDATIVES; NARCOTICS; DRUG ABUSE; FORENSIC MEDICINE; AUTOPSIES; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; DRUGS Levine, B.S.; Blanke, R.V.; Valentour, J.C. 1984 Journal of Forensic Sciences 29(1):131-138				

Tissue	Cases Exposure Route	Range	Mean	General Information
10158 Liver	2	17-63 mg/kg	40 mg/kg	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths UV
10159 Vitreous humor	6	2-22 mg/L	9 mg/L	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths UV
VITREOUS HUMOR; BLOOD; BRAIN; LIVER; KIDNEYS; BILE; URINE; AUTOPSIES; NARCOTICS; DRUG ABUSE; SEDATIVES; FORENSIC MEDICINE; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; DRUGS; DELIBERATE EXPOSURE Siminski, K.R.; Wemyss, C.T.; Bidanset, J.H.; Manning, T.J.; Lukash, L. 1984 Journal of Forensic Sciences 29(3):903-909				

Benzamide, N-(2-piperidinylmethyl)-2,5-bis(2,2,2-trifluoroethoxy)-
64143-88-4
C17-H20-F6-N2-O3

Tissue	Cases Exposure Route	Range	Mean	General Information
10160 Blood, plasma	4 Ingestion	a) 120->/=12.5 ng eq/ml b) 250-10 ng eq/ml c) 200-20 ng eq/ml	a) Not applicable b) Not applicable c) Not applicable	a) Unchanged flecainide, 1 and 72 hr, mean peak 251 ng/ml at 2 hr b) Total radioactivity (flecainide and metabolites), 1.5 and 120 hr, mean peak 650 ng eq/ml at 3 hr c) Total metabolites, 1.5 and 72 hr, mean peak, 415 ng eq/ml at 2 hr Single 200 mg oral dose as C-14 acetate, mean dose 1.96 mg/kg body wt. 4 healthy subjects, 36-56 yr GC
BLOOD PLASMA; DELIBERATE EXPOSURE; ANTIARRHYTHMIC AGENTS; BIOLOGICAL MONITORING; METABOLITES; URINE; DRUGS McQuinn, R.L.; Quarfoth, G.J.; Johnson, J.D.; Banitt, E.H.; Pathre, S.V.; Chang, S.F.; Ober, R.E.; Conard, G.J. 1984 Drug Metabolism and Disposition 12(4):414-420				

Benzamide, N-(2-piperidinylmethyl)-2,5-bis(2,2,2-trifluoroethoxy)-
54163-55-4
C17-H20-F6-N2-O3

Tissue	Cases Exposure Route	Range	Mean	General Information
10161 Blood, plasma	1 Ingestion	125-35 ng/ml	Not applicable	1-48 hr, peak (300 ng/ml) at 5 hr after 200 mg dose. New assay also detects presence in urine and saliva (data not given). Healthy volunteer GC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; ANTIARRHYTHMIC AGENTS; BIOACCUMULATION; DRUGS Johnson, J.D.; Carlson, G.L.; Fox, J.M.; Miller, A.M.; Chang, S.F.; Conard, G.J. 1984 Journal of Pharmaceutical Sciences 73(10)1469-1471				

Tissue	Cases Exposure Route	Range	Mean	General Information
10162 Urine	4 Ingestion	a) 14.23-31.60 ug/ml b) 35.2-49.9% c) 80.7-89.9%	a) 20.65 ug/ml b) 42.3% c) 86.0%	a) Unchanged drug, highest level in 0-24 hr collections b) Cumulative excretion unchanged drug, essentially complete by 72 hr c) Total C-14 (drug and metabolites) excretion, about 50% first 24 hr, complete by day 4 200-mg oral dose as C-14 acetate. Mean dose, 1.96 mg/kg body wt. 4 healthy subjects, 36-56 yr old GC
BLOOD PLASMA; DELIBERATE EXPOSURE; ANTIARRHYTHMIC AGENTS; BIOLOGICAL MONITORING; METABOLITES; URINE; DRUGS McQuinn, R.L.; Quarfoth, G.J.; Johnson, J.D.; Banitt, E.H.; Pathre, S.V.; Chang, S.F.; Ober, R.E.; Conard, G.J. 1984 Drug Metabolism and Disposition 12(4):414-420				

Benzamide, p-amino-N-(2-(diethylamino)ethyl)- (8 CI); Benzamide, 4-amino-N-(2-(diethylamino)ethyl)- (9 CI)
51-05-8
C13-H21-N3-O
MW 235.37

Tissue	Cases Exposure Route	Range	Mean	General Information
10163 Blood, plasma	9 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 1146.7+/-80.8 b) 1602.3+/-129.9 c) 305.36+/-30.11 d) 384.47+/-51.80 ug/min/ml	a) Control, before cimetidine b) Parent compound after cimetidine c) n-Acetylprocainamide metabolite, control, before cimetidine d) Metabolite, after cimetidine Area-under-the-curve data. Cimetidine dose was 1000 ug. Healthy volunteers, 25-40 yr old HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; GASTROINTESTINAL DISEASES; ANTIHISTAMINES; BIOACCUMULATION; BIOAVAILABILITY; METABOLITES; DRUGS Christian, C.D., Jr.; Meredith, C.G.; Speeg, K.V., Jr. 1984 Clinical Pharmacology and Therapeutics 36(2):221-227				

Benzamide, p-amino-N-(2-(diethylamino)ethyl)- (8 CI); Benzamide, 4-amino-N-(2-(diethylamino)ethyl)- (9 CI)
51-06-9
C13-H21-N3-O
MW 235.37

Tissue	Cases Exposure Route	Range	Mean	General Information
10164 Blood, serum	1 Ingestion	a) 1.0-1.0 mg/l b) 1.0-1.0 mg/l	a) Not applicable b) Not applicable	a) 0-15 hr, trough (0.9 mg/l) at 3 hr, peak (2.6 mg/l) at 12 hr b) N-acetyl-form, 0-15 hr, trough (0.5 mg/l) at 3 hr, peak (2.2 mg/l) at 12 hr 500 mg at 0, 6, and 12 hr during study. Normal dose 500 mg q.i.d. 30 yr old, 2 d postpartum Fluorimetry
BLOOD SERUM; MILK; DELIBERATE EXPOSURE; ADULTS; INFANTS; CARDIOVASCULAR DISEASES; HEART DISEASES; ANTIARRHYTHMIC AGENTS; DRUGS; DRUG THERAPY; LACTATION; PREGNANCY; BIOACCUMULATION; METABOLITES; CASE HISTORIES Pittard, W.B., III; Glazier, H. 1983 Journal of Pediatrics 102(4):631-633				

Tissue	Cases Exposure Route	Range	Mean	General Information
10166 Liver	1 Ingestion	Not applicable	11.6 ug/g	Drug levels considered in normal therapeutic range and did not cause death. 16 intact tablets in various stages of drug depletion found in GI tract. (In a fatality reported elsewhere, level was 385 ug/g) 76 yr old man who died of arteriosclerotic heart disease with pulmonary complications UV; GC/MS
DRUGS; DELIBERATE EXPOSURE; LIVER; AUTOPSIES Griesemer, E.C. 1984 Journal of Analytical Toxicology 8:244-245				

Tissue	Cases Exposure Route	Range	Mean	General Information
10166 Milk	1 Ingestion	a) 5.8-5.7 mg/l b) 4.1-4.0 mg/l	a) Not applicable b) Not applicable	a) 0-15 hr, peak (10.2 mg/l) 6 hr after 500 mg b) N-acetyl-form, 0-15 hr, trough (2.2 mg/l) at 12 hr 500 mg at 0, 6, 12 hr during study. Normal dose 500 mg q.i.d. 30 yr old, 2 d postpartum Fluorimetry
BLOOD SERUM; MILK; DELIBERATE EXPOSURE; ADULTS; INFANTS; CARDIOVASCULAR DISEASES; HEART DISEASES; ANTIARRHYTHMIC AGENTS; DRUGS; DRUG THERAPY; LACTATION; PREGNANCY; BIOACCUMULATION; METABOLITES; CASE HISTORIES Pittard, W.B., III; Glazier, H. 1983 Journal of Pediatrics 102(4):631-633				

Benzamide, 4-chloro-N-(2-methyl-1-indolinyl)-3-sulfamoyl- (8 CI); Benzamide, 3-(aminosulfonyl)-4-chloro-N-(2,3-dihydro-2-methyl-1H-indol-1-yl)- (9 CI)
26807-65-8
C16-H16-Cl-N3-O3-S
MW 365.84, MP 160-162 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10167 Blood	a) 4 b) 4 Ingestion	a) 0-20 ng/ml b) 0-33 ng/ml c) Not given d) Not given e) Not given	a) Not applicable b) Not applicable c) 180 ng/ml d) 104 ng/ml e) 150 ng/ml	a) 0-24 hr, peak (85 ng/ml) at 4 hr after 2.5 mg, nonfasting subjects b) 0-24 hr, peak (85 ng/ml) at 4 hr after 2.5 mg, fasting subjects c) Control, peak after 2.5 mg d) Peak after 2.5 mg plus milk of magnesia e) Peak after 2.5 mg plus aluminum hydroxide gel. Volunteers
BLOOD; DELIBERATE EXPOSURE; HYPERTENSION; ANTACIDS; ANTIHYPERTENSIVE AGENTS; DRUG THERAPY; DRUGS; DIURETICS Caruso, F.S.; Szabadi, R.R.; Vukovich, R.A. 1983 American Heart Journal 106(1):213-220				

Tissue	Cases Exposure Route	Range	Mean	General Information
10168 Blood	4 Ingestion	344-20 ng equiv/ml	Not applicable	0.5-96 hr, peak (344+/- 6 ng equiv/ml) at 0.5 hr after 4.99 mg. Healthy volunteers, 24-32 yr old Scintillation counting
10169 Blood, plasma	4 Ingestion	43-3 ng equiv/ml	Not applicable	0.5-96 hr, peak (43+/-1 ng equiv/ml) at 0.5 hr after 4.99 mg. Healthy volunteers, 24-32 yr old Scintillation counting
BLOOD PLASMA; BLOOD; URINE; DELIBERATE EXPOSURE; ADULTS; HYPERTENSION; CARDIOVASCULAR DISEASES; KIDNEY DISEASES; ANTIHYPERTENSIVE AGENTS; DIURETICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; RADIONUCLIDES; METABOLITES Kiuuk, L.J.; Ringel, S.; Neiss, E.S. 1983 Journal of Clinical Pharmacology 23:377-384				

Tissue	Cases Exposure Route	Range	Mean	General Information
10170 Blood, serum	a) 11 b) 9 c) 5 d) 4 e) 11 f) 9 g) 5 h) 4 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 185 ng/ml b) 210 ng/ml c) 216 ng/ml d) 284 ng/ml e) 76 ng/ml f) 117 ng/ml g) 127 ng/ml h) 119 ng/ml	a) Normal renal function, peak b) Mild renal insufficiency, peak c) Moderate renal insufficiency, peak d) Severe renal insufficiency, peak e) Normal renal function, trough f) Mild renal insufficiency, trough g) Moderate renal insufficiency, trough h) Severe renal insufficiency, trough steady-state after 2.5 mg/d. Safe and effective aide for hypertension in patients with renal impairment. Hypertensive patients with normal renal function or mild to severe renal insufficiency HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; HYPERTENSION; KIDNEY DISEASES; ANTIHYPERTENSIVE AGENTS; DRUG THERAPY; DRUGS; BIOACCUMULATION; BLOOD PRESSURE Acchiardo, S.R.; Shoutakis, V.A. 1983 American Heart Journal 106(1):237-244				

Bensamide, 4-chloro-N-(2-methyl-1-indolinyl)-3-sulfamoyl- (8 Cl); Bensamide, 3-(aminosulfonyl)-4-chloro-N-(2,3-dihydro-2-methyl-1H-indol-1-yl)- (9 Cl)
26807-65-8
C16-H16-Cl-N3-O3-S
MW 365.84, MP 160-162 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10171 Urine	4 Ingestion	Not applicable	70.3+/-1.5%	% recovery in 192 hr after 4.00 mg. 55% recovered in 48 hr. Healthy volunteers, 24-32 yr old Scintillation counting
BLOOD PLASMA; BLOOD; URINE; DELIBERATE EXPOSURE; ADULTS; HYPERTENSION; CARDIOVASCULAR DISEASES; KIDNEY DISEASES; ANTIHYPERTENSIVE AGENTS; DIURETICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; RADIONUCLIDES; METABOLITES Klunk, L.J.; Ringel, S.; Neiss, E.S. 1983 Journal of Clinical Pharmacology 23:377-384				

Bensamide, 4-methoxy-N-(2-(2-(1-methyl-2-piperidinyl)ethyl)phenyl)-, (+-)-
66778-36-7
C22-H30-N2-O2
MW 352.52

Tissue	Cases Exposure Route	Range	Mean	General Information
10172 Blood, plasma	12 Injection Ingestion	a) 90-0.2 ng/ml b) 4-0.5 ng/ml c) 4-5 ng/ml d) 5-8 ng/ml e) 100-40 ng/ml f) 500-200 ng/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) Extensive metabolizers, 8 cases, 0-14 hr, peak (90 ng/ml) 20 min after 10.7 mg IV b) 8 cases, 0-14 hr, peak (50 ng/ml) 1 hr after 50 mg oral c) 8 cases, 0-Desmethyl-form, 0-14 hr, peak (300 ng/ml) 1 hr after 10.7 mg IV d) 8 cases, 3-Methoxy-0-Desmethyl-form, 0-14 hr, peak (70 ng/ml) 2 hr after 10.7 mg IV e) Poor metabolizers, 4 cases, 0-14 hr, peak (100 ng/ml) 20 min after 10.7 mg IV f) 4 cases, 0-14 hr, peak (600 ng/ml) 1 hr after 50 mg oral. Healthy volunteers, 21-40 yr old, wt 50-85 kg HPLC
10173 Urine	12 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 4.03+/-2.30% b) 10.56+/-3.04% c) 3.55+/-2.76% d) 19.74+/-5.2% e) 93.33+/-5.61% f) 3.03+/-0.15% g) Not detected h) 44.61+/-5.04%	a) Extensive metabolizers, 8 cases, parent compound b) 8 cases, 0-desmethyl-metabolite c) 8 cases, 3-methoxy-0-desmethyl-metabolite d) 8 cases, total identifiable compounds e) Poor metabolizers, 4 cases, parent compound f) 4 cases, 0-desmethyl-metabolite g) 4 cases, 3-methoxy-0-desmethyl-metabolite h) 4 cases, total identifiable compounds % dose recovered in 24 hr after 10.7 mg IV. Healthy volunteers, 21-40 yr old, wt 50-85 kg HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; CARDIOVASCULAR DISEASES; ANTIARRHYTHMIC AGENTS; DRUG THERAPY; DRUGS; BIOACCUMULATION; GENETIC EFFECTS; METABOLISM; METABOLITES Wang, T.; Roden, D.M.; Wolfenden, H.T.; Woosley, R.L.; Wood, A.J.J.; Wilkinson, G.R. 1984 Journal of Pharmacology and Therapeutics 228(3):605-611				

Benzene
71-43-2
C6-H6
MW 78.11, MP 5.51 C, BP 80.093-80.094 C, VP 10 mm Hg at 26.1 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10174 Blood	1	Not applicable	0.0022%	Single-drug death, 1975-1980. Autopsy, Maryland State Medical Examiners office. Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Benzeneacetamide, N-(4-chlorophenyl)-N-(1-(1-methylethyl)-4-piperidinyl)-
59729-31-6
C22-H27-Cl-N2-O
MW 370.96

Tissue	Cases Exposure Route	Range	Mean	General Information
10175 Blood, plasma	a) 4 b) 8 Ingestion	a) 0-71 ng/ml b) 62-627 ng/ml	a) 11 ng/ml b) 215 ng/ml	a) Dosage 200 mg/d for 4 wk (body wt <75 kg) b) 300 mg/d for 4 wk (body wt <75 kg) Arrhythmias effectively suppressed in 7 patients. Mean levels not significantly different in responders and nonresponders. Part of crossover study with quinidine. Patients >18 yr old, with previously untreated frequent ventricular arrhythmias, Boston City Hospital 13 patients withdrew before completion of treatment because of side effects (mainly sleep or sensory disturbances) GLC
BLOOD PLASMA; DELIBERATE EXPOSURE; HEART DISEASES; ANTIARRHYTHMIC AGENTS; DRUGS; COMPARATIVE EVALUATIONS; METABOLITES Falk, R.H.; O'Brien, J.L. 1984 Chest 86(4):537-540				

Tissue	Cases Exposure Route	Range	Mean	General Information
10176 Blood, plasma	14 Ingestion Injection	a) 1500-10 ng/ml b) 54-504 ng/ml c) 162-678 ng/ml d) 28-454 mg/ml e) 102-603 ng/ml f) 100-30 ng/ml g) 220-165 ng/ml	a) Not given b) 187+/-147 ng/ml c) 315+/-161 ng/ml d) 164+/-154 ng/ml e) 293+/-160 ng/ml f) Not given g) Not given	a) 0-24 hr after 100-200 mg IV, separate graphs given for each case b) Steady state at 2 wk, 8 cases c) Norlorcainide metabolite, 2 wk d) Steady state at 4 wk, 8 cases e) Norlorcainide metabolite, 4 wk f) 4-24 hr, after one dose of long-term study, 1 case g) 4-24 hr, norlorcainide, after one dose of long-term study, 1 case 100 mg 2x/d oral dose for 4 wk in b)-g). a), f), g) estimated from graphs. Clearance decreased during long-term dosing. Patients, 37-74 yr, 59.0-121.0 kg, with chronic cardiac rhythm abnormalitites HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; ANTIARRHYTHMIC AGENTS; DRUGS; METABOLITES; BIOACCUMULATION; BIOAVAILABILITY Kates, R.E.; Keefe, D.L.; Winkle, R.A. 1983 Clinical Pharmacology and Therapeutics 33(1):26-34				

Benzeneacetamide, N-(4-chlorophenyl)-N-4-piperidinyl-
63260-75-8
C19-H21-Cl-N2-O

Tissue	Cases Exposure Route	Range	Mean	General Information
10177 Blood, plasma	a) 4 b) 8	a) 84-168 ng/ml b) 165-984 ng/ml	a) 98 ng/ml b) 334 ng/ml	a) Metabolite dosage 200 mg/d lorcainide for 4 wk (body wt <75 kg) b) 300 mg/d lorcainide for 4 wk (body wt >75 kg) Arrhythmias effectively suppressed in 7 patients. Patients >18 yr old, with previously untreated frequent ventricular arrhythmias, Boston City Hospital GLC
BLOOD PLASMA; DELIBERATE EXPOSURE; HEART DISEASES; ANTIARRHYTHMIC AGENTS; DRUGS; COMPARATIVE EVALUATIONS; METABOLITES Falk, R.H.; O'Brien, J.L. 1984 Chest 86(4):537-540				

Benzeneacetic acid, alpha-methyl-4-(2-thienylcarbonyl)-
40828-46-4
C14-H12-O3-S
MW 260.31, MP 124.8 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10178 Blood, plasma	6 Injection	a) 12.47-0.48 ug/ml b) 4.61-0.31 ug/ml c) 10.40-0.75 ug/ml d) 15.13-1.33 ug/ml e) 21.89-1.97 ug/ml	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 40-360 min after 200 mg oral b) 15-180 min after 50 mg IM c) 15-180 min after 100 mg IM d) 30-180 min after 150 mg IM e) 30-180 min after 200 mg IM Ranges of means. Peak at first time given. Healthy volunteers, 20-40 yr, 67-80 kg HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; ANALGESICS; BIOAVAILABILITY Sulliger, H.W.; Pascolt, A. 1983 Arzneimittel-Forschung/Drug Research 33(11)9:1322-1326				

Tissue	Cases Exposure Route	Range	Mean	General Information
10179 Blood, plasma	6 Ingestion	18.6+/-9.0-0.12+/-0.18 ug/ml	Not applicable	0.5-8 hrs, peak (18.9+/-6.4 ug/ml) 1.0 hr after 200 mg. Nursing mothers, volunteers HPLC
10180 Milk	6 Ingestion	0.1+/-0.01-0.01+/-0.01 ug/ml	Not applicable	0.5-8 hrs, peak (0.14+/-0.05 ug/ml) 1.0 hr after 200 mg. Nursing infant minimally exposed after recommended doses to mother. Nursing mothers, volunteers HPLC
BLOOD PLASMA; MILK; DELIBERATE EXPOSURE; ADULTS; ANALGESICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; LACTATION Chaikin, P.; Chasin, M.; Kennedy, B.; Silverman, B.K. 1983 Journal of Clinical Pharmacology 23:386-390				

Benzeneethanol, alpha-(2-amino-1-methylethyl)-alpha-phenyl-, propanoate (ester), (S-(R*,S*))-
42576-07-8
C20-H25-N-O2
MW 311

Tissue	Cases Exposure Route	Range	Mean	General Information
10181 Blood	1 Ingestion	Not applicable	6.8 mg/L	Postmortem levels after taking >12 Darvocet-N tablets 19 yr old male Caucasian, wt 77 kg, ht 1.85 m Unconsciousness, probably at >2 hr, <7 hr, death <14 hr, possibly <7 hr after ingestion of tablets GC/MS
DELIBERATE EXPOSURE; DRUGS; SUICIDE; AUTOPSIES; BLOOD; URINE; ANALGESICS Eberhardt, R.D.; Cash, D.K. 1984 Journal of Analytical Toxicology 8:246-247				

Tissue	Cases Exposure Route	Range	Mean	General Information
10182 Blood	a) 44 b) 46 c) 25 d) 25 e) 19	a) 0.3-57 mg/l b) 0.1-31 mg/l c) 0.16-68 mg/l d) 1.0-26 mg/l e) 0.3-57 mg/l	a) 8.2 mg/l b) 2.9 mg/l c) 10.1+/-18.5 mg/l d) 7.0 mg/l e) 9.7 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths, 1979-1980 d) Single-drug deaths, without ethanol, 1975-1980 e) Single-drug deaths, with ethanol, 1975-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Benzenesulfonamide, 2-chloro-5-(4-hydroxy-3-methyl-2-(methylimino)-4-thiazolidinyl)-
56488-58-5
C11-H14-Cl-N3-O3-S2

Tissue	Cases Exposure Route	Range	Mean	General Information
10183 Blood, plasma	Injection	a) 750-70 ng/ml b) 480-150 ng/ml c) 550-15 ng/ml	a) Not applicable b) Not applicable c) Not applicable	a) 0-12 hr, peak (750 ng/ml). Patients with mild renal insufficiency (GFR >30 ml/min) b) 0-12 hr, peak (480 ng/ml). Patients with moderate renal insufficiency (GFR <30 ml/min) c) 0-12 hr, peak (550 ng/ml). Controls Peaks immediately after 50 mg, IV. Clearance decreased with decreasing renal function. Healthy volunteers (2 females, 3 males, 23-32 yr old) and patients with mild to moderate renal insufficiency (3 females, 7 males, 30-68 yr old) HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; SWEDEN; KIDNEY DISEASES; DIURETICS; DRUG THERAPY; DRUGS; BIOACCUMULATION Beermann, B.; Odlind, B.; Wibell, L. 1983 Clinical Nephrology 19(3):126-131				

Benzenesulfonamide, 4-amino-N-2-pyrimidinyl-, mixt. with 5-((3,4,5-trimethoxyphenyl)methyl)-2,4-pyrimidinediamine
39474-58-3
C14-H18-N4-O3.C10-H10-N4-O2-S

Tissue	Cases Exposure Route	Range	Mean	General Information
10184 Blood, serum	20 Ingestion	a) 9.07+/-8.47-4.37+/-1.35 mg/l b) 0.70+/-0.33-0.52+/-0.34 mg/l	a) Not applicable b) Not applicable	a) Sulphadiazine, peak 35.43+/-5.89 mg/l at 2.8+/-1.0 hr b) Trimethoprim, peak 2.45+/-0.54 mg/l at 3.0+/-1.1 hr 1 g/d for 4 d. Immediately before and 24 hr after 4th dose. a) and b) components of parent drug. Ranges of means. Healthy volunteers, mean age 26.2 yr; Mean wt 70.5+/-13.9 kg Microbiological
10185 Nasal secretion	20 Ingestion	a) 18.73+/-29.82-9.22+/-7.57 mg/l b) 1.82+/-1.68-2.47+/-3.81 mg/l	a) Not applicable b) Not applicable	a) Sulphadiazine, peak 61.23+/-33.62 mg/l at 3.3+/-2.4 hr b) Trimethoprim, peak 7.72+/-5.13 mg/l at 4.5+/-2.8 h 1 g/d for 4 d. Sampled immediately before 4th dose and 2, 3, 4, 5, 12 and 24 hr after. a) and b) components of parent drug. Ranges of means, 0 and 24 hr. Healthy volunteers, mean age 26.2 yr; Mean wt 70.5+/-13.9 kg Microbiological
BLOOD SERUM; RESPIRATORY SECRETION; DELIBERATE EXPOSURE; DRUGS; ANTIBIOTICS; MALARIA Ullmann, U.; Giebel, W.; Bamberg, P. 1983 Journal of Antimicrobial Chemotherapy 11:89-92				

Benzenesulfonamide, 5-(1-hydroxy-2-((2-(2-methoxyphenoxy)ethyl)amino)ethyl)-2-methyl-, (+-)-
65320-68-9
C18-H24-N2-O5-S

Tissue	Cases Exposure Route	Range	Mean	General Information
10186 Blood, plasma	a) 7 b) 2 c) 2 d) 4 e) 4 f) 6 Injection Ingestion	a) 1.0-0.15 ug/ml b) 0.005-0.0055 ug/ml c) 0.015-0.02 ug/ml d) 0.006-0.023 ug/ml e) 0.5-0.1 ug/ml f) 0.6-0.3 ug/ml	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 10 min and 8 hr after single 0.16 mg/kg, IV b) 12.5 mg. Peak 0.20 ug/ml at 4 hr c) 25 mg. Peak 0.40 ug/ml at 3 hr d) 50 mg. Peak 1.11+/-0.12 ug/ml at 2.5+/-0.7 hr e) 100 mg. Peak 1.87+/-0.34 ug/ml at 2.4+/-0.4 hr f) 150 mg. Peak 4.09+/-0.32 ug/ml at 2.5+/-0.7 hr b-f) 30 min and 24 hr after oral dose. 24-45 yr old (33.3+/-1.0 yr) healthy subjects, mean wt 62.1+/-1.36 kg (48-75 kg) Dizziness Systemic hypotension with no heart rate increase HPLC; GC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; ANTIHYPERTENSIVE AGENTS; DRUGS Nakashima, M.; Asano, M.; Oiguchi, S.; Hashimoto, H.; Seki, T.; Miyazaki, M.; Takenaka, T. 1984 Clinical Pharmacology and Therapeutics 36(4):436-443				

Benzoic acid, p-hydroxy-, methyl ester (8 CI); Benzoic acid, 4-hydroxy-, methyl ester (9 CI)
99-76-3
C8-H8-O3
MW 152.14, MP 131 C, BP 270-280 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10187 Urine	6 Injection	a) 9.26-74.9 ug b) 15.3-88.1%	a) Not given b) Not given	a) Total recovered in 24 hr after 70-100 ug IM b) % recovery in 24 hr after 70-100 ug IM Parent drug used as preservative for gentamicin solution, used for treatment of sepsis. New assay. Preterm infants, 4 males, 4 females, birth wt 0.69-1.50 kg, estimated gestational age 26-31 wks. HPLC
URINE; DELIBERATE EXPOSURE; PREMATURE INFANTS; NEWBORN; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION Hindmarsh, K.W.; John, E.; Azali, L.A.; French, J.N.; Williams, G.L.; McBride, W.G. 1983 Journal of Pharmaceutical Sciences 72(9):1039-1041				

Benzoic acid, 2-hydroxy-, 2-carboxyphenyl ester
552-94-3
C14-H10-O5
MW 258.23, MP 280 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10188 Blood, plasma	2 Ingestion	a) 120-10 ug/ml b) 38-4 ug/ml c) 77-4 ug/ml d) 18-4 ug/ml	a) Not given b) Not given c) Not given d) Not given	a) 4-36 hr, free salicylic acid, case 1 b) 3-6 hr, salsalate c) 7-30 hr, free salicylic acid, case 2 d) 5-9 hr, salsalate After 2000 mg with 64 uCi C-14 Drug was well absorbed but rapid excretion prevented complete hydrolysis to salicylic acid in vivo. Healthy volunteers, 20 and 35 yr HPLC; Scintillation counting
10189 Urine	2 Ingestion	a) 1090.0-2036.0 mg equiv b) 50.7-90.5 mg c) 264.3-328.6 mg d) 3.4-6.2 mg e) 136.0-200.0 mg f) 58.7-75.4 mg g) 1514.7-1707.2 mg h) 1961.4-2014.0 mg	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) Total radioactivity b) Free salicylic acid c) Conjugated salicylic acid d) Free salsalate e) Conjugated salsalate f) Gentisic acid g) Salicyluric acid h) Total salicylate Total recovery 0-48 hr, after 2000 mg (64 uCi). Drug was well absorbed but rapid excretion prevented complete hydrolysis to salicylic acid in vivo. Also given as % of dose. Healthy volunteers, 20 and 35 yr HPLC; Colorimetry
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; DRUGS; ANTIINFLAMMATORY AGENTS; METABOLISM; METABOLITES; BIOAVAILABILITY Dromgoole, S.H.; Furst, D.E.; Paulus, H.E. 1984 Journal of Pharmaceutical Sciences 73(11):1657-1659				

Benzoic acid, 3-(aminosulfonyl)-4-phenoxy-5-(1-pyrrolidinyl)-
55837-27-9
C17-H18-N2-O5-S
MW 362.40

Tissue	Cases Exposure Route	Range	Mean	General Information
10190 Blood, plasma	21 Ingestion	a) 95-1 ng/ml b) 190-1 ng/ml c) 390-1 ng/ml	a) Not applicable b) Not applicable c) Not applicable	a) 15-720 min, peak (200 ng/ml) at 40+/-2.4 min after 3 mg b) 15-720 min, peak (400 ng/ml) at 38+/-1.7 min after 6 mg c) 15-720 min, peak (700 ng/ml) at 40+/-3.0 min after 12 mg. Healthy volunteers, 22-29 yr old RIA
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; DIURETICS; DRUG THERAPY; DRUGS; BIOACCUMULATION Brater, D.C.; Anderson, S.; Baird, B.; Kaojarern, S. 1988 Clinical Pharmacology and Therapeutics 34(3):324-330				

Tissue	Cases Exposure Route	Range	Mean	General Information
10191 Blood, serum	4 Ingestion	a) 510-880 ng/ml b) 1.65-2.44 ug.h/ml	a) Not given b) 2.05 ug.h/ml	a) Peak 1-2 hr after 18 mg b) Area under curve, 0-24 hrs, after 18 mg (2 patients) and 18 mg b.i.d. (2 patients). Patients with chronic renal failure, 46-64 yr old, 3 males, 1 female RIA
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; NORWAY; KIDNEY DISEASES; DIURETICS; DRUGS; DRUG THERAPY; BIOACCUMULATION Berg, K.J.; Walstad, R.A.; Bergh, K. 1983 British Journal of Clinical Pharmacology 15:347-353				

Tissue	Cases Exposure Route	Range	Mean	General Information
10192 Urine	21 Ingestion	a) Not given b) Not given c) Not given	a) 1.34+/-0.21 mg b) 2.73+/-0.29 mg c) 5.48+/-0.56 mg	a) Dose: 3 mg b) Dose: 6 mg c) Dose: 12 mg Total excretion in 48 hr. Healthy volunteers, 22-29 yr old RIA
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; DIURETICS; DRUG THERAPY; DRUGS; BIOACCUMULATION Brater, D.C.; Anderson, S.; Baird, B.; Kaojarern, S. 1983 Clinical Pharmacology and Therapeutics 34(3):324-330				

Benzoic acid, 3-(aminosulfonyl)-5-(butylamino)-4-phenoxy-
28395-03-1
C17-H20-N2-O5-S
MW 364.42, MP 230-231 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10193 Blood, plasma	12 Injection Ingestion	a) 180-4 ng/ml b) 30-2 ng/ml c) 7-2 ng/ml d) 2-2 ng/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 0-3 hr, peak (180 ng/ml) at 6 min, IV b) 0-5 hr, peak (35 ng/ml) at 30 min, IM c) 0-4 hr, peak (30 ng/ml) at 45 min oral, solution d) 0-5 hr, peak (24 ng/ml) at 1 hr oral, tablet 1 mg dose. Data estimated from graphs. Volunteers, 23-40 yr old, 54-96 kg weight. R/A
10194 Urine	12 Injection Ingestion	a) 0-69+/-11% b) 0-66+/-9% c) 0-57+/-12% d) 0-58+/-7%	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) IV b) IM c) Oral, solution d) Oral, tablet % 1 mg dose at 0 and 24 hr Volunteers, 23-40 yr old, 54-96kg weight. RIA
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; DIURETICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; BIOLOGICAL MONITORING Holaso, A.A.; Colburn, W.A; Gustafson, J.H.; Young, R.L.; Parsonnet, M. 1984 Journal of Pharmaceutical Sciences 73(8):1108-13				

Tissue	Cases Exposure Route	Range	Mean	General Information
10195 Urine	a) 10 b) 10 c) 10 d) 8 e) 8 Ingestion Injection	a) 22-41% b) 19-36% c) 18-43% d) Not given e) Not given	a) 33+/-8% b) 27+/-6% c) 30+/-9% d) 36+/-10% e) 37+/-9%	a) 0.5 mg oral b) 1.0 mg oral c) 2.0 mg oral d) 0.5 mg IV e) 1.0 mg IV % dose recovered in 24 hr. Healthy volunteers HPLC
URINE; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; DIURETICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; DRUG INTERACTION Brater, D.C.; Chennavasin, P.; Day, B.; Burdett, A.; Anderson, S. 1983 Clinical Pharmacology and Therapeutics 34(2):207-213				

Benzoic acid, 3,5-diacetamido-2,4,6-triiodo- (8 CI); Benzoic acid, 3,5-bis(acetylamino)-2,4,6-triiodo- (9 CI)
117-96-4
C11-H9-I3-N2-O4
MW 618.90, MP greater than 300 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10196 Blood	1	Not applicable	2310 mg/l	Single-drug death, 1975-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooke, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Benzoic acid, 4-amino-2-chloro-, 2-(diethylamino)ethyl ester
133-16-4
C13-H19-Cl-N2-O2
MW 270.76

Tissue	Cases Exposure Route	Range	Mean	General Information
10197 Blood, fetal	26 Injection	a) Not given b) 100-180 ng/ml c) Not given d) Not given e) Not given f) <100-200 ng/ml	a) <30 ng/ml b) 140 ng/ml c) <30 ng/ml d) <30 ng/ml e) 1000 ng/ml f) Not given	a) Umbilical artery, 26 cases b) Umbilical vein, 2 cases c) Umbilical vein, 27 cases d) CABA metabolite, umbilical artery, 26 cases e) CABA metabolite, umbilical vein, 1 case f) CABA metabolite, umbilical vein, 26 cases At delivery. Mother received 40 ml of 1% solution during labor. Neonates, gestational age 40.2+/-1.5 wk Mild bradycardia GC
10198 Blood, plasma	29 Injection	a) Not given b) 11-72 ng/ml c) Not given d) Not given e) Not given f) <100-200 ng/ml	a) <30 ng/ml b) 42 ng/ml c) <30 ng/ml d) 4050+/-2250 ng/ml e) 3133+/-1568 ng/ml f) Not given	a) 5 min after injection, 13 cases b) At delivery, 2 cases c) At delivery, 27 cases d) CABA metabolite, 5 min after injection, 13 cases e) CABA metabolite, at delivery, 6 cases f) CABA metabolite, at delivery, 21 cases Maternal vein. 40 ml 1% solution during labor. Healthy 18-39 yr olds undergoing childbirth GC

BLOOD PLASMA; FETAL BLOOD; DELIBERATE EXPOSURE; ADULTS; NEWBORN; ANESTHETICS; DRUG THERAPY; DRUGS; BIOACCUMULATION; TRANSPLACENTAL TRANSFER; PREGNANCY; METABOLITES
Weiss, R.R.; Halevy, S., Almonte, R.O.; Gundersen, K.; Hinsvark, O.N.; O'Brien, J.E. 1983 Anesthesia and Analgesia 62:168-173

Benzyl alcohol, alpha-(aminomethyl)-3,4-dihydroxy-, (-)- (8 CI); 1,2-Benzenediol, 4-(2-amino-1-hydroxyethyl)-, (R)- (9 CI)
51-41-2
C8-H11-N-O3
MW 169.18, MP 191 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10199 Blood, plasma	8 Ingestion Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 0.48+/-0.19 ng/ml b) 0.58+/-0.27 ng/ml c) 0.85+/-0.23 ng/ml d) 1.32+/-0.43 ng/ml e) 1.26+/-0.34 ng/ml f) 1.76+/-0.52 ng/ml g) 2.06+/-0.46 ng/ml h) 2.49+/-0.88 ng/ml	a) Controls b) 1 mg/kg ethanol c) 24 ng/kg/min IV for 20 min d) 24 ng/kg/min IV for 20 min, after 1 mg/kg ethanol e) 48 ng/kg/min IV for 20 min f) 48 ng/kg/min IV for 20 min, after 1 mg/kg ethanol g) 90 ng/kg/min IV for 20 min h) 90 ng/kg/min IV for 20 min, after 1 mg/kg ethanol Ethanol elevated levels by reducing plasma clearance. Healthy volunteers, 22-26 yr old GC; Radioenzymatic

BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; DRUG INTERACTION; ALCOHOLS; ALCOHOLIC BEVERAGES; ALCOHOLIC BEVERAGES; BIOACCUMULATION
Eisenhofer, G.; Lamble, D.G.; Johnson, R.H. 1983 Clinical Pharmacology and Therapeutics 34(2):143-147

Benzyl alcohol, p-hydroxy-alpha-(1-((p-hydroxyphenethyl)amino)ethyl)-, erythro- (8 CI); Benzenemethanol, 4-hydroxy-alpha-(1-((2-(4-hydroxyphenyl)ethyl)amino)ethyl)-, (R*,S*)- (9 CI)
26652-09-5
C17-H21-N-O3
MW 287.37, MP 86-90 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10200 Blood, serum	a) 10 b) 1 c) 6 Injection	a) 15-81 ng/ml b) 71-91 ng/ml c) 90-146 ng/ml	a) 21+/-2 ng/ml b) Not applicable c) 113+/-8 ng/ml S.E.	a) 50 ug/min, contractions stopped b) 200-250 ug/min, contractions stopped c) 350 ug/min, contractions did not stop. Women in preterm labor Hypotension, vomiting, chest discomfort, and shortness of breath HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; PREGNANCY; DRUGS Caritis, S.N.; Lin, L.S.; Toig, G.; Wong, L.K. 1983 American Journal of Obstetrics and Gynecology 147(7):752-759				

Benzyl alcohol, 3,4-dihydroxy-alpha-((methylamino)methyl)-, (-)- (8 CI); 1,2-Benzenediol, 4-(1-hydroxy-2-(methylamino)ethyl)-, (R)- (9 CI)
51-43-4
C9-H13-N-O3
MW 183.20, MP 211-212 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10301 Gastric fluid	a) 12 b) 6	a) 11-293 pg/ml b) 680-2,500,000 pg/ml	a) 117 pg/ml b) 530,000 pg/ml	a) Controls b) Affected infants affected treated with recurring substitution of epinephrine for Vit E. 1 death Premature 24.6 d olds, mean gestational age 30.8 wk, mean wt 1331 g. 22.2 d old, mean gestational age 29.8 wk, mean wt 1015g Intolerance to feeding, lethargy, respiratory insufficiency, shock Ileus, induration of abdominal wall, leukocytosis, leukopenia, transient hyperglycemia, hyperkalemia and acidosis. Autopsy: eroded gut mucosa, yeast infections
DELIBERATE EXPOSURE; NEWBORN; GASTRIC FLUID; ACCIDENTAL POISONING; DRUGS Solomon, S.L.; Wallace, E.M.; Ford-Jones, E.L.; Baker, W.M.; Martone, W.J.; Kopin, I.J.; Crita, A.D.; Allen, J.R. 1984 New England Journal of Medicine 310(3):166-170				

Bleomycin
11056-06-7
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Tissue	Cases Exposure Route	Range	Mean	General Information
10202 Lung				Review. Mechanism for development of pulmonary fibrosis in patients receiving cytotoxic drugs.
10203 Skin				Review. Mechanism for development of pulmonary fibrosis in patients receiving cytotoxic drugs.
LUNGS; SKIN; DELIBERATE EXPOSURE; NEOPLASMS; PULMONARY DISEASES; ANTITUMOR AGENTS; DRUG THERAPY; DRUGS; REVIEW Adamson, I.Y.R. 1984 Environmental Health Perspectives 55:25-36				

Boric acid
10043-35-3
B-H3-O3
MW 61.84, MP about 171 C, BP 300 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10204 Blood, plasma	8 Injection	a) <0.1-0.38+/-0.05 mg/l b) 10-20 mg/l	a) <0.23 mg/l b) Not given	a) Range of means during 72 hr prior to IV, in 7 subjects b) 25 min after start of 20-min infusion of 570-620 mg, 6 from a) Measured as boron. 22-28 yr old healthy volunteers, Denmark Spectrophotometry
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; DENMARK; BORON; DRUGS Jansen, J.A.; Andersen, J.; Schou, J.S. 1984 Archives of Toxicology 55:64-67				

Tissue	Cases Exposure Route	Range	Mean	General Information
10206 Blood, plasma	1 Ingestion	Not applicable	170 ug/l	Day 4 post-admission after 1 mo of ear irrigations with a total of 1.4 L of merthiolate containing 1.4 g/L as borate. 1 g/L is approximate lethal dose. Contained 1 g/L Hg 18 mo old white female. Ear irrigations and subsequent swallowing of merthiolate draining through tympanostomy tubes Symptoms of Hg/borate toxicity included staring spells, ataxia, unprovoked screaming/opisthotonic posturing, tremor, incoordination, vomiting, nystagmus, scaled skin, coma, renal and hepatic failure, hypertension, congestive heart failure. Died 3 mo post-admission EEG abnormal, acidosis, dehydration, hyperglycemia AAS
BLOOD; BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ANTISEPTIC; DRUGS; DRUG THERAPY; CASE HISTORIES Rohyans, J.; Watson, P.D.; Wood, G.A.; MacDonald, W.A. 1984 Journal of Pediatrics 104(2):311-313				

Tissue	Cases Exposure Route	Range	Mean	General Information
10206 Urine	8 Injection	2.10+/-0.46-11.08+/-4.68 mg	Not given	Excreted, in 12 hr fractions, during 72 hr prior to IV. After infusion of 570-620 mg, more than 90% dose excreted within 5 d. Daily variations in normal excretion reflected simultaneous alimentary intake. Measured as boron. 22-28 yr old healthy volunteers, Denmark Chem
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; DENMARK; BORON; DRUGS Jansen, J.A.; Andersen, J.; Schou, J.S. 1984 Archives of Toxicology 55:64-67				

Bromide
24959-67-9
Br
MW 79.90, MP -7.2 C, BP 58.78 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10207 Blood	1	Not applicable	1750 mg/l	Single-drug death, 1975-1980. Autopsy, Maryland State Medical Examiners office. Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1988 Journal of Analytical Toxicology 7:225-230				

Butanamide, N-(3-acetyl-4-(2-hydroxy-3-((1-methylethyl)amino)propoxy)phenyl)-, (+-)-
37517-30-9
C16-H26-N2-O4
MW 326.43, MP 119-123 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10208 Blood, plasma	1 Ingestion	a) Not given b) Not given c) Not given	a) 15 mg/l b) 0.7 mg/l c) 0.4 mg/l	a) About 1 hr after 7600 mg (19 tablets sectral) b) 10 hr c) 17 hr 15 yr old female overdose victim Severe hypotension HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; CONSUMER EXPOSURE; ADOLESCENTS; DRUGS; DRUG ABUSE; BETA BLOCKER Sangeter, B.; de Wildt, D.; van Dijk, A.; Klein, S. 1988 Clinical Toxicology 26(1):69-77				

Tissue	Cases Exposure Route	Range	Mean	General Information
10209 Blood, plasma	a) 5 b) 5 c) 5 d) 5 e) 5 f) 4 g) 5 h) 4 Injection Ingestion	a) 800-30 mg/l b) 2000-20 mg/l c) 40-40 mg/l d) 30-30 mg/l e) 471-975 ug/l f) 1353-1891 ug/l g) 636-1017 ug/l h) 1017-2432 ug/l	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) 735+/-90 ug/l f) 1607+/-110 ug/l g) 774+/-67 ug/l h) 1606+/-283 ug/l	a) Young healthy subjects (YHS) 0-8 hr, peak (800 mg/l) after 0.35 mg/kg, IV b) Aged hypertensive subjects (AHS), 0-12 hr, peak (2000 mg/l) c) YHS, diacetolol metabolite, 0-8 hrs, peak (50 mg/l) at 1 hr d) AHS, diacetolol, 0-12 hrs, peak (50 mg/l) at 2 hr e) YHS, peak after 400 mg oral f) AHS, peak g) YHS, diacetolol metabolite, peak h) AHS, diacetolol metabolite, peak. Healthy young male volunteers, 22-26 yr old, wt 75.0+/-1.7 kg. Elderly female hypertensive patients, 67-86 yr old, wt 58.1+/-3.2 kg HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; FRANCE; AGE; HYPERTENSION; ANTIHYPERTENSIVE AGENTS; DRUG THERAPY; DRUGS; BIOACCUMULATION; METABOLITES Roux, A.; Henry, J.P.; Fouache, Y.; Chau, N.P.; Hervy, M.P.; Forette, F.; Bourdarias, J.P.; Plouvat, B. 1983 Gerontology 29:202-208				

Butyrophenone, 4-(4-(p-bromophenyl)-4-hydroxypiperidino)-4'-fluoro- (8 CI); 1-Butanone, 4-(4-(4-bromophenyl)-4-hydroxy-1-piperidinyl)-1-(4-fluorophenyl)- (9 CI)
10457-90-6
C21-H23-Br-F-N-O2

Tissue	Cases Exposure Route	Range	Mean	General Information
10210 Blood, plasma	15	a) 1.65+/-0.97-3.75+/-0.04 ng/ml b) 6.67+/-1.51-8.25+/-1.83 ng/ml c) 7.14+/-1.19-12.02+/-5.06 ng/ml d) 10.15+/-6.48-12.77+/-5.19 ng/ml e) 9.20+/-0.42-30.24+/-2.11 ng/ml f) 32.28+/-4.13-55.15+/-14.85 ng/ml	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 10 mg dose, 2 patients b) 12-15 mg dose, 2 patients c) 20 mg dose, 3 patients d) 30 mg dose, 3 patients e) 50 mg dose, 3 patients f) 60 mg dose, 2 patients Minimum levels, blood collected prior to giving dose in tablet form, once daily. Schizophrenic patients maintained on drug RIA
BLOOD PLASMA; DELIBERATE EXPOSURE; PSYCHOTROPIC DRUGS; DRUGS; MEASUREMENT METHODS; BROMINE ORGANIC COMPOUNDS Tiechle, J.; Hetyei, N.; Patrick, J. 1984 Journal of Pharmaceutical Sciences 73(4):546-548				

Butyrophenone, 4-(4-(p-chlorophenyl)-4-hydroxypiperidino)-4'-fluoro- (8 CI); 1-Butanone, 4-(4-(4-chlorophenyl)-4-hydroxy-1-piperidinyl)-1-(4-fluorophenyl)- (9 CI)
52-86-8
C21-H23-Cl-F-N-O2
MW 375.88, MP 148-149.4 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10211 Blood, plasma		<1.0-60 ug/l	Not given	Samples from large number of patients receiving different dosages and various co-medications. HPLC
BLOOD PLASMA; MEASUREMENT METHODS; DELIBERATE EXPOSURE; DRUGS; PSYCHOTROPIC DRUGS Dhar, A.K.; Kutt, H. 1984 Clinical Chemistry 30(7):1228-1230				

Tissue	Cases Exposure Route	Range	Mean	General Information
10212 Blood, serum	1 Injection Ingestion	a) 28-1.5 ng/ml b) 5-5 ng/ml	a) Not applicable b) Not applicable	a) 0-50 min, rapid decline from 28 ng/ml to 5 ng/ml in 5 min, moderate decline thereafter, following 0.125 mg/kg IV b) 1-50 min, peak (58 ng/ml) at 5 min after 0.50 mg/kg oral Representative subject. GC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; BEHAVIOR DISORDERS; NEUROLOGIC MANIFESTATIONS; ANTICONVULSANTS; SEDATIVES; DRUGS; DRUG THERAPY; BIOACCUMULATION Holley, F.O.; Magliozzi, J.R.; Stanzhi, D.R.; Lombroso, L.; Hollister, L.E. 1983 Clinical Pharmacology and Therapeutics 33(4):477-484				

Caffeine (8 CI); 1H-Purine-2,6-dione, 3,7-dihydro-1,3,7-trimethyl- (9 CI)
58-08-2
C8-H10-N4-O2
MW 194.19, MP 238 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10213 Blood				Review. Metabolism and pharmacokinetics of theophylline, adverse effects, and effects of age and disease states on absorption, distribution, and elimination.
BLOOD PLASMA; URINE; BLOOD; BRAIN; HEART; LIVER; LUNGS; KIDNEYS; SPLEEN; BLOOD SERUM; DELIBERATE EXPOSURE; NEWBORN; CHILDREN; ADULTS; AUTOPSIES; DRUGS; REVIEW; THEOPHYLLINES; METABOLISM; METABOLITES; CAFFEINE Haley, T.J. 1983 Drug Metabolism Reviews 14(2):305-335				

Tissue	Cases Exposure Route	Range	Mean	General Information
10214 Blood	113	0-11 ug/ml	2.85+/-2.309 ug/ml	From umbilicial cord, sampled at delivery. New assay for caffeine and metabolites. Results suggest fetal exposure to caffeine and dimethylxanthenes higher than previously indicated. Newborn, Leeds Maternity Hospital, Leeds, UK HPLC
FETAL BLOOD; ENVIRONMENTAL EXPOSURE; FETUS; CAFFEINE; THEOPHYLLINES; BIOACCUMULATION; PREGNANCY; DRUGS Hartley, R.; Cookman, J.R.; Smith, I.J. 1984 Journal of Chromatography 306:191-203				

Tissue	Cases Exposure Route	Range	Mean	General Information
10215 Blood	1 Ingestion	Not given	5.5 ug/ml	Autopsy. Combined levels of ethanol, methanol, and isopropanol <5 mg/dl. Data also for clomipramine, somepirac, salicylates, acetaminophen, indomethacin, oxycodone, lorasepam. 57 yr old treated for depression, joint pain. Excessive drinking on occasion. Confusion, weakness, intoxication, death. Death due to clomipramine toxicity. TLC; GC/MS
AUTOPSIES; BEHAVIOR DISORDERS; NEUROLOGIC MANIFESTATIONS; BLOOD; URINE; ANTIDEPRESSIVE AGENTS; ANALGESICS; DRUGS; DRUG ABUSE; ALCOHOLS; METABOLITES; CASE HISTORIES; DELIBERATE EXPOSURE Meatherall, R.C.; Guay, D.R.P.; Chalmers, J.L.; Keenan, J.R. 1983 Journal of Analytical Toxicology 7:168-171				

Tissue	Cases Exposure Route	Range	Mean	General Information
10216 Blood	a) 4 b) 5 Ingestion	a) 7.59-0.44 ug/ml b) 3.34-0.36 ug/ml	a) Not given b) Not given	a) 2 and 12 hr after 400 mg b) 3 and 10 hr after 200 mg Pharmacokinetic data also reported Healthy 20-35 yr old nonsmokers HPLC
BLOOD; SEMEN; DELIBERATE EXPOSURE; DRUGS; STIMULANTS; CAFFEINE Beach, C.A.; Bianchine, J.R.; Gerber,N. 1984 Journal of Clinical Pharmacology 24:120-126				

Caffeine (8 CI); 1H-Purine-2,6-dione, 3,7-dihydro-1,3,7-trimethyl- (9 CI)
58-08-2
C8-H10-N4-O2
MW 194.19, MP 238 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10217 Blood	1 Ingestion	Not given	14.6 ug/ml	10 d postpartum. Coffee intake <6 cups/d. (24 c/d until 5 d before delivery). Theophylline level 3.8 ug/ml. 40.2 ug/ml caffeine in 5 d old infant's serum. 28 yr old HPLC
BLOOD SERUM; BLOOD; SALIVA; CONSUMER EXPOSURE; CASE HISTORIES; NEWBORN; PREMATURE INFANTS; RESPIRATORY DISEASES; DRUG ABUSE; DRUGS; STIMULANTS; CAFFEINE; HEALTH HAZARDS; METABOLISM; PREGNANCY; TRANSPLACENTAL TRANSFER Khanna, N.N.; Somani, S.M. 1984 Clinical Toxicology 22(5):473-483				

Tissue	Cases Exposure Route	Range	Mean	General Information
10218 Blood	a) 1 b) 17	a) Not applicable b) 1.0-270 mg/l	a) 240 mg/l b) 20.5 mg/l	a) From single-drug death, 1975-1980 b) Non-drug related deaths, 1975-1980. Autopsy, Maryland State Medical Examiners office.
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1985 Journal of Analytical Toxicology 7:226-230				

Tissue	Cases Exposure Route	Range	Mean	General Information
10219 Blood, plasma	4 Ingestion	5-7.5 ug/ml	Not given	1 hr after 74-146 mg. Peak. Significant correlation with milk (r=.65) and saliva (r=.81) ($p<0.301$). Estimated from graph. 28-35 yr old healthy nursing mothers HPLC
BLOOD PLASMA; MILK; SALIVA; DELIBERATE EXPOSURE; ADULTS; CAFFEINE; LACTATION; DRUGS Berlin, C.M.; Denson, H.M.; Daniel, C.H.; Ward, R.M. 1984 Pediatrics 73(1):59-63				

Tissue	Cases Exposure Route	Range	Mean	General Information
10220 Blood, plasma	Ingestion	a) 9.4+/-1.1-5.0+/-1 ug/ml b) 8.5+/-0.5-2.4+/-0.5 ug/ml S.E.	a) Not given b) Not given	a) 1-4 hr after 500 mg b) 1-4 hr after 250 mg Peak at 1 hr. 4 hr levels estimated from graph. Endocrine hormone effects measured and discussed. 8-10 subjects/time point Healthy students, 18-30 yr, normally drink 1-3 cups coffee per day HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADOLESCENTS; ADULTS; DRUGS; STIMULANTS; CAFFEINE; BIOLOGICAL MONITORING Spindel, E.R.; Wurtman, R.J.; McCall, A.; Carr, D.B.; Conlay, L.; Griffith, L.; Arnold, M.A. 1984 Clinical Pharmacology and Therapeutics 36(3):402-407				

Caffeine (8 CI); 1H-Purine-2,6-dione, 3,7-dihydro-1,3,7-trimethyl- (9 CI)
58-08-2
C8-H10-N4-O2
MW 194.19, MP 238 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10221 Blood, plasma	12 Ingestion	a) 6.1-12.8 ug/ml b) 1.6-5.5 ug/ml c) 0.4-3.2 ug/ml d) 5.4-13.8 ug/ml e) 1.6-5.3 ug/ml f) 0.4-1.0 ug/ml	a) 8.5+/-1.05 ug/ml b) 3.0+/-0.56 ug/ml c) 1.8+/-0.41 ug/ml d) 9.5+/-1.32 ug/ml e) 2.5+/-0.30 ug/ml f) 0.66+/-0.10 ug/ml S.E.	a) Zero time (estimate) after 2 cups coffee (260-350 mg), in 6 subjects with coffee-attributed sleep disturbances b) 8 hr c) 16 hr d) Zero time (estimate) after 2 cups coffee (260-350 mg), in 6 subjects without coffee-attributed sleep disturbances b) 8 hr c) 16 hr Plasma half-life in first group 7.4+/-1.2 (S.E.) hr, in second group 4.2+/-0.5 (S.E.) hr. Rate of metabolism seems to determine effect on sleep. Healthy 22-45 yr old volunteers HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; DRUGS; STIMULANTS; CAFFEINE; FOODS; METABOLISM Levy, M.; Zylber-Katz, E. 1983 Clinical Pharmacology and Therapeutics 33(6):770-775				

Tissue	Cases Exposure Route	Range	Mean	General Information
10222 Blood, plasma				Review. Metabolism and pharmacokinetics of theophylline, adverse effects, and effects of age and disease states on absorption, distribution, and elimination.
BLOOD PLASMA; URINE; BLOOD; BRAIN; HEART; LIVER; LUNGS; KIDNEYS; SPLEEN; BLOOD SERUM; DELIBERATE EXPOSURE; NEWBORN; CHILDREN; ADULTS; AUTOPSIES; DRUGS; REVIEW; THEOPHYLLINES; METABOLISM; METABOLITES; CAFFEINE Haley, T.J. 1983 Drug Metabolism Reviews 14(2):295-335				

Tissue	Cases Exposure Route	Range	Mean	General Information
10228 Blood, plasma	1 Ingestion	a) 4.5-0.03 mg/L b) 0.09-0.05 mg/L c) 0.03-0.05 mg/L d) 0.24-0.15 mg/L	a) Not given b) Not given c) Not given d) Not given	a) Caffeine, peak 10.5 mg/L at 2 hr b) Metabolite, theophylline, plateau 0.30 mg/L 5-15 hr c) Metabolite, theobromine, 0.2 mg/L 5-15 hr d) Metabolite, paraxanthine, 2.8 mg/L 5-15 hr 1 and 32 hr after 7.5 mg/kg. Estimated from graph for representative subject. Representative from 4 healthy subjects, 24-32 yr old, wt 61-80 kg HPLC
URINE; BLOOD PLASMA; DELIBERATE EXPOSURE; CALIFORNIA; CAFFEINE; THEOPHYLLINES; METABOLISM; METABOLITES Tang-Liu, D.D.-S.; Williams, R.L.; Riegelman, S. 1983 Journal of Pharmacology and Experimental Therapeutics 224(1):180-184				

Caffeine (8 CI); 1H-Purine-2,6-dione, 3,7-dihydro-1,3,7-trimethyl- (9 CI)
58-08-2
C8-H10-N4-O2
MW 194.19, MP 238 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10224 Blood, plasma	a) 4 b) 3 c) 4 Ingestion	a) 6.22+/-1.77-1.47+/-0.83 ug/ml b) 6.77+/-1.98-4.22+/-0.80 ug/ml c) 6.99+/-2.08-0.63+/-0.34 ug/ml	a) Not applicable b) Not applicable c) Not applicable	a) Male controls, 0.25-24 hrs, peak (9.60+/-1.17 ug/ml) 1 hr after 5 mg/kg b) Females using oral contraceptives, 0.25-24 hrs, peak (9.89+/-0.74 ug/ml) 2 hr after 5 mg/kg c) Female controls, peak (10.52+/-1.31 ug/ml) 1 hr after 5 mg/kg Data also subdivided into metabolites. Healthy volunteers, 7 females, 4 males, 18-30 yr old HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; DRUGS; STIMULANTS; CAFFEINE; BIOACCUMULATION; METABOLISM; METABOLITES Callahan, M.M.; Robertson, R.S.; Branfman, A.R.; McComish, M.F.; Yessir, D.W. 1983 Drug Metabolism and Disposition 11(3):211-217				

Tissue	Cases Exposure Route	Range	Mean	General Information
10225 Blood, serum	20 Ingestion	a) Not given b) Not given	a) 4.1+/-3.0 mg/l b) 8.4+/-3.7 mg/l	a) Entire group, before coffee b) 30-40 min after 2 cups coffee (200 mg caffeine) Highly significant increase, $p<0.001$. Similar increase in hypertensives. Volunteers, 37.5+/-2.8 wk gestation, coffee drinkers (3-6 cups/d) Significantly elevated serum epinephrine (36% > fasting levels, $p<0.01$). Intervillous placental blood flow reduced 23%, $p<0.05$ (already less in hypertensives, umbilical circulation unaffected) GC
DELIBERATE EXPOSURE; BLOOD SERUM; PREGNANCY; TRANSPLACENTAL TRANSFER; CAFFEINE; INGESTION; HYPERTENSION; DRUGS Kirkinen, P.; Jouppila, P.; Koivula, A.; Vuori, J.; Puukka, M. 1983 American Journal of Obstetrics and Gynecology 147(8):939-942				

Tissue	Cases Exposure Route	Range	Mean	General Information
10226 Blood, serum	1 Ingestion	2.4-0.2 mg/dl	Not given	0-30 hr post-admission, peak at 0. 48 diuretic Aqua-Ban tablets (total 4.8 g caffeine) taken during 24 hr pre-admission. 18 yr old anorexic Caucasian. Cincinnati, OH. Transient psychotic episode began 12 hr post-admission, lasted 36 hr. Ketonuria and hypokalemia, also mild cardiovascular effects.
BLOOD SERUM; DELIBERATE EXPOSURE; CASE HISTORIES; BEHAVIOR DISORDERS; NUTRITIONAL DISORDERS; DIURETICS; DRUG ABUSE; DRUGS; STIMULANTS; CAFFEINE; ACCIDENTAL POISONING Shaul, P.W.; Farrell, M.K.; Maloney, M.J. 1984 Journal of Pediatrics 105(3):403-405				

Caffeine (8 CI); 1H-Purine-2,6-dione, 3,7-dihydro-1,3,7-trimethyl- (9 CI)
58-08-2
C8-H10-N4-O2
MW 194.19, MP 238 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10227 Blood, serum	13 Ingestion	Not given	13.5+/-2.9 mg/l	1.1+/-0.6 hr after 10 mg anhydrous/kg body wt. Peak. Significant bronchodilator effect, similar to theophylline, maximal at 2 hr, and remaining at 6 hr. Caffeine metabolized to paraxanthine, theobromine, and theophylline. Asthmatic 8-16 yr olds, After 48 hr without methylxanthines. LC
BLOOD SERUM; DELIBERATE EXPOSURE; RESPIRATORY DISEASES; COMPARATIVE EVALUATIONS; CAFFEINE; THEOPHYLLINES; DRUGS Becker, A.B.; Simons, K.J ; Gillespie, C.A.; Simons, F.E.R. 1984 New England Journal of Medicine 310(12):743-746				

Tissue	Cases Exposure Route	Range	Mean	General Information
10228 Blood, serum	Ingestion	a) 4-8 mg/L b) 0-2 mg/L	a) Not given b) Not given	a) Adult coffee drinkers b) Untreated newborns, 16 Report on efficient and reliable test for monitoring serum during treatment of infantile apnea. No case number given for a)
BLOOD SERUM; DELIBERATE EXPOSURE; NEWBORN; STIMULANTS; MEASUREMENT METHODS; CAFFEINE; THEOPHYLLINES Turnbull, J.D.; Meshriy, R.; Gere, J.A.; Kochalka, G.; 1984 Clinical Chemistry 30(10):1721				

Tissue	Cases Exposure Route	Range	Mean	General Information
10229 Blood, serum	1	40.3-0.7 ug/ml	Not given	5-37 days old. Peak 48.4 ug/ml at 13 d. Drug administered, after sampling 5 d, for treatment of apnea. Loading dose 10 mg/kg, then 2 doses 5 mg/kg/12 hr. Additional dose of 10 mg/kg on d 12. Coffee intake by mother up to 24 cups/d for several wk prior to delivery, except 6 c/d during last 5 d. Prolonged plasma half-life and delayed clearance in infant. No theophylline detected. Infant, birth wt 1236 g at 27 wk gestation HPLC
BLOOD SERUM; BLOOD; SALIVA; CONSUMER EXPOSURE; CASE HISTORIES; NEWBORN; PREMATURE INFANTS; RESPIRATORY DISEASES; DRUG ABUSE; DRUGS; STIMULANTS; CAFFEINE; HEALTH HAZARDS; METABOLISM; PREGNANCY; TRANSPLACENTAL TRANSFER Khanna, N.N.; Somani, S.M. 1984 Clinical Toxicology 22(5):473-483				

Tissue	Cases Exposure Route	Range	Mean	General Information
10230 Brain				Review. Metabolism and pharmacokinetics of theophylline, adverse effects, and effects of age and disease states on absorption, distribution, and elimination.
10231 Heart				Review. Metabolism and pharmacokinetics of theophylline, adverse effects, and effects of age and disease states on absorption, distribution, and elimination.

(next page)

Caffeine (8 CI); 1H-Purine-2,6-dione, 3,7-dihydro-1,3,7-trimethyl- (9 CI)
58-08-2
C8-H10-N4-O2
MW 194.19, MP 238 C

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
10232 Kidney				Review. Metabolism and pharmacokinetics of theophylline, adverse effects, and effects of age and disease states on absorption, distribution, and elimination.
10233 Liver				Review. Metabolism and pharmacokinetics of theophylline, adverse effects, and effects of age and disease states on absorption, distribution, and elimination.
10234 Lung				Review. Metabolism and pharmacokinetics of theophylline, adverse effects, and effects of age and disease states on absorption, distribution, and elimination.
BLOOD PLASMA; URINE; BLOOD; BRAIN; HEART; LIVER; LUNGS; KIDNEYS; SPLEEN; BLOOD SERUM; DELIBERATE EXPOSURE; NEWBORN; CHILDREN; ADULTS; AUTOPSIES; DRUGS; REVIEW; THEOPHYLLINES; METABOLISM; METABOLITES; CAFFEINE Haley, T.J. 1983 Drug Metabolism Reviews 14(2):295-335				

Tissue	Cases Exposure Route	Range	Mean	General Information
10235 Milk	11 Ingestion	2.09-7.17 ug/ml	Not given	1 hr after 48-336 mg. Peak. Significant correlation with plasma (r=.65) ($p<0.001$). No behavioral effects in infants. Not detected in 4 mothers who consumed 35-86 mg. 23-35 yr old healthy nursing mothers HPLC
10236 Saliva	11 Ingestion	1.24-9.22 ug/ml	Not given	1 hr after 48-336 mg. Peak. Significant correlation with plasma (r=.81) ($p<0.001$). Not detected in 4 mothers who consumed 35-86 mg. 23-35 yr old healthy nursing mothers HPLC
BLOOD PLASMA; MILK; SALIVA; DELIBERATE EXPOSURE; ADULTS; CAFFEINE; LACTATION; DRUGS Berlin, C.M.; Denson, H.M.; Daniel, C.H.; Ward, R.M. 1984 Pediatrics 73(1):59-63				

Tissue	Cases Exposure Route	Range	Mean	General Information
10237 Saliva	6 Ingestion	1-14 ug/ml	Not applicable	0-600 mg dose, linear response. Healthy volunteers, 3 males, 3 females HPLC
SALIVA; DELIBERATE EXPOSURE; ADULTS; DRUGS; DRUG INTERACTION; STIMULANTS; CAFFEINE; BIOACCUMULATION; SMOKING Chait, L.D.; Griffiths, R.R. 1983 Clinical Pharmacology and Therapeutics 34(5):612-622				

Caffeine (8 CI); 1H-Purine-2,6-dione, 3,7-dihydro-1,3,7-trimethyl- (9 CI)
58-08-2
C8-H10-N4-O2
MW 194.19, MP 238 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10238 Saliva	1	42.5-2.6 ug/ml	Not given	6-37 days old. Peak 46.5 ug/ml at 14 d. Drug administered, after sampling at 5 d, for treatment of apnea. Loading dose 10 mg/kg, then 2 doses 5 mg/kg/12 hr. Additional dose of 10 mg/kg on d 12. Coffee intake by mother up to 24 cups/d for several wk prior to delivery, except 6 c/d during last 5 d. Prolonged plasma half-life and delayed clearance in infant. No theophylline detected. Infant, birth wt 1236 g at 27 wk gestation HPLC
BLOOD SERUM; BLOOD; SALIVA; CONSUMER EXPOSURE; CASE HISTORIES; NEWBORN; PREMATURE INFANTS; RESPIRATORY DISEASES; DRUG ABUSE; DRUGS; STIMULANTS; CAFFEINE; HEALTH HAZARDS; METABOLISM; PREGNANCY; TRANSPLACENTAL TRANSFER Khanna, N.N.; Somani, S.M. 1984 Clinical Toxicology 22(5):473-483				

Tissue	Cases Exposure Route	Range	Mean	General Information
10239 Semen	a) 6 b) 5 Ingestion	a) 8.54-0.43 ug/ml b) 3.63-0.42 ug/ml	a) Not given b) Not given	a) 1 and 12 hr after 400 mg b) 0.5 and 10 hr after 200 mg Almost identical to blood levels. Pharmacokinetic data also reported. Healthy 20-35 yr old nonsmokers HPLC
BLOOD; SEMEN; DELIBERATE EXPOSURE; DRUGS; STIMULANTS; CAFFEINE Beach, C.A.; Bianchine, J.R.; Gerber,N. 1984 Journal of Clinical Pharmacology 24:120-126				

Tissue	Cases Exposure Route	Range	Mean	General Information
10240 Urine	6 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 3.7+/-1.0% b) 0.8+/-0.6% c) 1.2+/-0.5% d) 7.1+/-1.7%	a) Caffeine b) Metabolite, theophylline c) Metabolite, theobromine d) Metabolite, paraxanthine 0-60 hr after 7.5 mg/kg. 8 other metabolites range from 2.3-21.0%. 67+/-8% total recovery. Healthy subjects, 24-32 yr old, wt 61-80 kg HPLC
URINE; BLOOD PLASMA; DELIBERATE EXPOSURE; CALIFORNIA; CAFFEINE; THEOPHYLLINES; METABOLISM; METABOLITES Tang-Liu, D.D.-S.; Williams, R.L.; Riegelman, S. 1983 Journal of Pharmacology and Experimental Therapeutics 224(1):180-184				

Caffeine (8 CI); 1H-Purine-2,6-dione, 3,7-dihydro-1,3,7-trimethyl- (9 CI)
58-08-2
C8-H10-N4-O2
MW 194.19, MP 238 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10241 Urine	1 Ingestion	Not given	24 ug/ml	Autopsy. Combined levels of ethanol, methanol and isopropanol <5 mg/l. Data also for clomipramine, zomepirac, salicylates, acetaminophen, indomethacin, oxycodone, lorazepam. 57 yr old treated for depression, joint pain. Excessive drinking on occasion. Confusion, weakness, intoxication, death. Death due to clomipramine toxicity. TLC; GC/MS
AUTOPSIES; BEHAVIOR DISORDERS; NEUROLOGIC MANIFESTATIONS; BLOOD; URINE; ANTIDEPRESSIVE AGENTS; ANALGESICS; DRUGS; DRUG ABUSE; ALCOHOLS; METABOLITES; CASE HISTORIES; DELIBERATE EXPOSURE				
Meatherall, R.C.; Guay, D.R.P.; Chalmers, J.L.; Keenan, J.R. 1988 Journal of Analytical Toxicology 7:168-171				

Tissue	Cases Exposure Route	Range	Mean	General Information
10242 Urine	16 Injection Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 1.89+/-2.29% b) 1.07+/-0.36% c) 1.18+/-0.41% d) 1.12+/-0.46%	a) 8 elderly, oral dose b) IV dose c) 8 young, oral dose d) IV dose % recovery of 5 mg/kg in 24 hr. Young volunteers, 18-24 yr old, and elderly volunteers, 66-78 yr old
URINE; DELIBERATE EXPOSURE; ADULTS; AGE; DRUGS; STIMULANTS; CAFFEINE; BIOACCUMULATION				
Blanchard, J.; Sawers, J.A. 1988 Journal of Clinical Pharmacology 23:134-138				

Tissue	Cases Exposure Route	Range	Mean	General Information
10243 Urine	a) 4 b) 3 c) 4 Ingestion	a) Not given b) Not given c) Not given	a) 71.74+/-11.57% b) 61.96+/-3.78% c) 67.01+/-13.04%	a) Male controls b) Females using oral contraceptives c) Female controls % of 5 mg/kg dose excreted in 48 hr. Data also subdivided into metabolites. Healthy volunteers, 7 females, 4 males, 18-30 yr old HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; DRUGS; STIMULANTS; CAFFEINE; BIOACCUMULATION; METABOLISM; METABOLITES				
Callahan, M.M.; Robertson, R.S.; Branfman, A.R.; McComish, M.F.; Yessir, D.W. 1988 Drug Metabolism and Disposition 11(3):211-217				

Calcium
7440-70-2
Ca
AtW 40.08, MP 850 C, BP 1440 C, VP 10 mm Hg at 983 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10244 Blood, serum	38 Ingestion	a) Not given b) Not given	a) 2.51+/-0.09 mmol/L b) 2.44+/-0.11 mmol/L	a) Prior to study b) After 12 wk of increasing doses from 400-1200 mg/d Significant difference $p<0.01$. 9.31+/-1.99 yr olds with ADD, 6 females, 35, males, 30.78+/-11.02 kg, IQ 101.33+/-11.38 Nausea, anorexia, gagging and abdominal pain
BLOOD SERUM; DELIBERATE EXPOSURE; CANADA; CHILDREN; BEHAVIOR DISORDERS; VITAMINS; VITAMIN C; DRUGS Haslam, R.H.A.; Dalby, J.T.; Rademaker, A.W. 1984 Pediatrics 74(1):103-111				

Tissue	Cases Exposure Route	Range	Mean	General Information
10245 Blood, serum	2 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 8.5 mg/dl b) 10.4 mg/dl c) 11.4 mg/dl d) 10.3 mg/dl	a) Mother, at delivery b) Umbilical cord c) Infant, 11 d d) Infant, 25 d Mother during pregnancy and lactation took 1 g Ca, vitamin and mineral supplement (400 IU vitamin D, 350 mg Ca), 100,000 IU vitamin D/d. Normal infant levels 9-11 mg/dl. Breast fed for 25 d, no clinical symptoms of hypercalcemia Healthy infant. Her 27 yr old mother with familial multiple endocrine adenomatosis (10 yr duration)
10246 Milk	1 Ingestion	Not given	33.5 mg/dl	14 d lactation. Breast-fed for 25 d. Infant Ca levels elevated but no clinical symptoms of hypercalcemia. Mother took 1 gm Ca, vitamin/mineral supplement (400 IU vitamin D, 350 mg Ca) and 100,000 IU vitamin D/d. 27 yr old mother with familial multiple endocrine adenomatosis (10 yr duration)
BLOOD SERUM; MILK; DELIBERATE EXPOSURE; ADULTS; INFANTS; CALCIUM; MAGNESIUM; VITAMIN D; LACTATION; METABOLITES; DRUGS Greer, F.R.; Hollie, B.W.; Napoli, J.L. 1984 Journal of Pediatrics 105(1):61-64				

Cannabinoids (No postings in CHEMLINE).

Tissue	Cases Exposure Route	Range	Mean	General Information
10247 Urine	4 1	0-2 ng/ml	Not applicable	0-12 d, peak (500 ng/ml) at 6 hr. Positive ID at 12 days. Initial dose 20 mg delta-9-THC in Cannabis Resin. Volunteers, 27-34 yr, good health and no previous experience with cannabis HPLC; RIA
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; UNITED KINGDOM; ADULTS; DRUG ABUSE; DRUGS; PSYCHOTROPIC DRUGS; FORENSIC MEDICINE; ALKALOIDS; VOLATILE ORGANIC COMPOUNDS; BIOACCUMULATION; BIOLOGICAL MONITORING; METABOLITES Law, B.; Mason, P.A.; Moffat, A.C.; Gleadle, R.I.; King, L.J. 1984 Journal of Pharmacy and Pharmacology 36:289-294				

Cannabinoids (No postings in CHEMLINE).

Tissue	Cases Exposure Route	Range	Mean	General Information
10248 Urine	6 Inhalation	a) <20 ng/ml b) <20-21 ng/ml c) <20-21 ng/ml	a) Not given b) Not given c) Not given	a) In small room, 2 subjects (26 samples) b) In car, 2 subjects (23 samples) c) In small room, 3 consecutive days, 2 subjects (27 samples) Passive inhalation from 2-4 marihuana cigarettes. Each voided sample collected separately for 24 hr. Only 1 sample in b) and 1 in c) were considered positive. Young, healthy adults, normal, never used marihuana. EMIT
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; PSYCHOTROPIC DRUGS Perez-Reyes, M.; Di Guiseppi, S.; Mason, A.P.; Davis, K.H. 1983 Clinical Pharmacology and Therapeutics 34(1):36-41				

Carbamic acid, (2,5-bis(1-aziridinyl)-3,6-dioxo-1,4-cyclohexadiene-1,4-diyl)bis-, diethyl ester
57998-68-2
C16-H20-N4-O6

Tissue	Cases Exposure Route	Range	Mean	General Information
10249 Blood, plasma	5 Injection	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable i) Not applicable j) Not applicable k) Not applicable	a) 61 ng/ml b) 20 ng/ml c) 14 ng/ml d) 157 ng/ml e) 106 ng/ml f) 64 ng/ml g) 47 ng/ml h) 570 ng/ml i) 400 ng/ml j) 300 ng/ml k) 31 ng/ml	a) Patient 1, 60 min b) Patient 1, 106 min c) Patient 1, 120 min d) Patient 2, 45 min e) Patient 2, 67 min f) Patient 2, 80 min g) Patient 2, 100 min h) Patient 7, 10 min i) Patient 7, 45 min j) Patient 7, 78 min k) Patient 7, 150 min After start of 20 mg/sq m IV infusion. a)-g) 35 min infusion. h)-k) 78 min infusion, estimated from graph. A large fraction of the area under the curve was during the infusion. Patients, 22-72 yr, with grade 3 or 4 glioma, who had undergone prior cranial irradiation. Fever, mild nausea, diarrhea Neutropenia, myelosuppression HPLC

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Carbamic acid, (2,5-bis(1-aziridinyl)-3,6-dioxo-1,4-cyclohexadiene-1,4-diyl)bis-, diethyl ester
57998-68-2
C16-H20-N4-O6

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
10260 Brain	2 Injection	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable	a) 27 ng/ml b) 624 ng/g c) <3 ng/g d) 127 ng/ml e) <3 ng/g f) <3 ng/g g) <3 ng/g	a) 1.00 ml cyst fluid, patient 1, 60 min b) 0.348 g peripheral tumor, patient 1, 106 min c) 0.040 g central tumor, patient 1, 120 min d) 1.00 ml cyst fluid, patient 2, 45 min e) 0.051 g tumor, patient 2, 67 min f) 0.185 g tumor, patient 2, 80 min g) 0.347 g tumor, patient 2, 100 min After 20 mg/sq m IV. c) and e)-g) were below detection limits. Data representative of 28 patients treated. Patients, 22-72 yr, with grade 3 or 4 glioma, who had undergone prior cranial irradiation. Fever, mild nausea, diarrhea Neutropenia, myelosuppression HPLC
BLOOD PLASMA; BRAIN; DELIBERATE EXPOSURE; ADULTS; ANTITUMOR AGENTS; DRUGS; DRUG THERAPY; BIOPSIES; CHEMOTHERAPY; BIOCONCENTRATION Curt, G.A.; Kelley, J.A.; Kufta, C.V.; Smith, B.H.; Kornblith, P.L.; Young, R.C.; Collins, J.M. 1983 Cancer Research 43:6102-6105				

Carbamic acid, ethyl-, 1-(6,7-dimethoxy-1-phthalazinyl)-4-piperidinyl ester
70724-25-3
C18-H24-N4-O4

Tissue	Cases Exposure Route	Range	Mean	General Information
10251 Blood, plasma	7 Ingestion Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) 7.7-13.4 ug/ml	a) 1.98+/-0.78 ug/ml b) 0.84+/-0.28 ug/ml c) 0.36+/-0.16 ug/ml d) 0.14+/-0.05 ug/ml e) <0.05 ug/ml f) <0.05 ug/ml g) Not given	a) 2 min after 126 mg/kg IV over 10 min b) 10 min c) 20 min d) 40 min e) 80 min f) 0.5, 1, 2, 3, 4, 5, 6, and 8 hr after 350 mg oral g) Peak metabolite levels, 1 hr after 250 mg (50 uCi) oral, 2 cases Human bioavailability was too low to measure. In dogs, it was 68%, with marked difference in metabolism. Healthy adult volunteers, 67-80 kg HPLC; Scintillation counting
10252 Urine	2 Ingestion Injection	a) 47.0-53.3% b) 4.5-4.9% c) 0.8-1.7% d) 0.1-0.3% % of dose	a) Not given b) Not given c) Not given d) Not given	a) 0-24 hr b) 24-48 hr c) 48-72 hr d) 72-96 hr Collection periods after [illegible] mg (50 uCi). Healthy adult volunteers, 67-80 kg Scintillation counting
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; DRUGS; STIMULANTS; COMPARATIVE EVALUATIONS; BIOLOGICAL MONITORING; METABOLISM; METABOLITES; BIOAVAILABILITY Kaye, B.; Offerman, J.L.; Reid, J.L.; Elliott, H.L.; Hillis, W.S. 1984 Xenobiotica 14(12):935-945				

Carbamic acid, isopropyl-, 2-(hydroxymethyl)-2-methylpentyl ester carbamate (ester) (8 CI); Carbamic acid, (1-methylethyl)-, 2-(((aminocarbonyl)oxy)methyl)-2-methylpentyl ester (9 CI)
78-44-4
C12-H24-N2-O4
MW 260.33, MP 92-93 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10268 Blood	a) 1 b) 1	a) Not applicable b) Not applicable	a) 21 mg/l b) 1.7 mg/l	a) From single-drug death, 1975-1980 b) From multiple-drug related death, 1979-1980 Autopsy, Maryland State Medical Examiners office. Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooke, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Carbonic acid monosodium salt
144-55-8
C-H2-O3.Na
MW 84.01

Tissue	Cases Exposure Route	Range	Mean	General Information
10264 Blood	1	17-24.8 mmol/l	Not given	0-2 hr in arterial blood, peak at 2 hr. 50 mmol Na-biocarbonate given at about 10, 20, and 60 min to correct recurrent arrythmias caused by 5.35 imipramine hydrochloride ingested 5 hr earlier. Therapy also included hyperventilation and administration of physostigmine and diazepam. 23 yr old female, tricyclic antidepressant overdose, Canada
BLOOD; DELIBERATE EXPOSURE; CANADA; CASE HISTORIES; HEART DISEASES; HYPOTENSION; ANTIARRHYTHMIC AGENTS; ANTIDEPRESSIVE AGENTS; DRUG ABUSE; DRUGS Molloy, D.W.; Penner, S.B.; Rabson, J.; Hall, K.W. 1984 Canadian Medical Association Journal 130:1457-1459				

Carminomycin
39472-31-6
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Tissue	Cases Exposure Route	Range	Mean	General Information
10255 Blood, plasma	1 Injection	a) 400-8 ng/ml b) 100-100 ng/ml	a) Not applicable b) Not applicable	a) 1-50 hr, peak (400 ng/ml) at 1 hr after 0.36 mg/kg IV b) 13-hydroxyl-metabolite, 1-50 hr, peak (200 ng/ml) at 5 hr after 0.36 mg/kg IV New assay. Patient on chemotherapy for malignancy HPLC

(next page)

Carminomycin
80472-81-6
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
10256 Urine	1 Injection	a) 9,000-100 ng/min b) 12,000-400 ng/min	a) Not applicable b) Not applicable	a) Renal excretion rate after 0.36 mg/kg IV. Total recovery over 50 hr 10.0% b) Renal excretion rate of 13-hydroxyl-metabolite following 0.36 mg/kg IV. Total recovery over 50 hr 6.6% New assay. Patient on chemotherapy for malignancy HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; NETHERLANDS; CARCINOMAS; ANTITUMOR AGENTS; CHEMOTHERAPY; BIOACCUMULATION; DRUG THERAPY; DRUGS; METABOLITES Oosterbaan, M.J.M.; Dirks, R.J.M.; Vree, T.B.; Van Der Kleijn, E. 1984 Journal of Chromatography 306:323-332				

Carotenes and Carotenoids
36-88-4
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Tissue	Cases Exposure Route	Range	Mean	General Information
10257 Blood, plasma	50 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) 186+/-12-181+/-15 ug/dL	a) 203+/-14 ug/dL b) 167+/-14 ug/dL c) 170+/-10 ug/dL d) 165+/-24 ug/dL e) 190+/-18 ug/dL f) 170+/-18 ug/dL g) 506+/-66 ug/dL h) 468+/-67 ug/dL i) Not given S.E.	a) Baseline, alpha-tocopherol group, 15 cases b) 16 wk, 800 IU/d, alpha-tocopherol c) Baseline, retinyl palmitate group, 15 cases d) 16 wk, 25000 IU/d retinyl palmitate, 16 of c) e) 16 wk, 25000 IU/d retinyl palmitate, wk 1-16 and 800 IU/d alpha-tocopherol, wk 8-16, 6 of c) f) Baseline, beta-carotene group, 14 cases g) 16 wk, 30 mg/d beta-carotene, 4 of f) h) 16 wk, 30 mg/d beta-carotene, wk 1-16 and 800 IU/d alpha-tocopherol, wk 8-16, 5 of f) i) Baseline and 16 wk, controls, placebo 1x/d Additional data given. 23-57 yr old healthy laboratory staff volunteers not taking vitamin supplements Spectrophotometry
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; COMPARATIVE EVALUATIONS; VITAMIN A; VITAMIN E; CAROTENOIDS Willett, W.C.; Stampfer, M.J.; Underwood, B.A.; Taylor, J.O.; Hennekens, C.H. 1983 American Journal of Clinical Nutrition 38:559-566				

Catechol (8 CI); 2H-1-Benzopyran-3,5,7-triol, 2-(3,4-dihydroxyphenyl)-3,4-dihydro-, (2R-trans)- (9 CI)
154-23-4
C15-H14-O6
MW 290.28, MP 175-177 C (anhydrous)

Tissue	Cases Exposure Route	Range	Mean	General Information
10258 Blood, cells	3 Ingestion	0.62-0.9 ug eq/ml Ranges of means	Not applicable	C-14, 1-120 hr, peak 7.0+/-1.5 ng eq/ml at 4 hr. Single dose (4x500 mg) (+)-[U-C-14] cyanidol-3. Estimated from graph. Healthy 25-35 yr old males, nonsmokers HPLC

(next page)

Catechol (8 CI); 2H-1-Benzopyran-3,5,7-triol, 2-(3,4-dihydroxyphenyl)-3,4-dihydro-, (2R-trans)- (9 CI)
154-23-4
C15-H14-O6
MW 290.28, MP 175-177 C (anhydrous)

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
10259 Blood, plasma	3 Ingestion	a) 0.25+/-0.5-0.08 ug eq/ml b) 1.8-1.8+/-1.0 ug eq/ml Ranges of means	a) Not applicable b) Not applicable	a) Unchanged drug, 1-24 hr, peak 0.81-2.0 ug/ml at 3 hr b) C-14, 1-120 hr, peak 11+/-1 ug eq/ml at 3 hr Single dose (4x500 mg) (+)-[U-C-14] cyanidol-3. Estimated from graph. Healthy 25-35 yr old males, nonsmokers HPLC
10260 Urine	3 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 10% b) 15% c) 9.5% d) 5.5% e) 1.5% f) 1%	a) 3'-o-methyl-(+)-catechin glucuronide b) (+)-catechin glucuronide c) 3'-o-methyl-(+)-catechin sulfate d) 3'-o-methyl-(+)-catechin glucuronide-sulfate e) 3'-o-methyl-(+)-catechin f) (+)-catechin sulphate Metabolites, % dose, 48 hr cumulative recovery after single dose (4x500 mg) (+)-[U-C-14] cyanidol-3. Recovery 90% complete in 24 hr. 0.1-1.4% excreted as unchanged drug. Estimated from graph for representative subject. Healthy 25-35 yr old males, nonsmokers HPLC; TLC; Scintillation counting
BLOOD PLASMA; BLOOD; URINE; DELIBERATE EXPOSURE; ANTIBIOTICS; METABOLITES; DRUGS Hackett, A.M.; Griffiths, L.A.; Broillet, A.; Wermeille, M. 1983 Xenobiotica 13(5):279-286				

Chloral hydrate (8 CI); 1,1-Ethanediol, 2,2,2-trichloro- (9 CI)
302-17-0
C2-H3-Cl3-O2
MW 165.42, MP 57 C (also reported as 52 C), BP 98 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10261 Blood	2	Not applicable	150 mg/l	Single-drug deaths, 1975-1980. Autopsy, Maryland State Medical Examiners office. Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:226-230				

Chloroform (8 CI); Methane, trichloro- (9 CI)
67-66-3
C-H-Cl3
MW 119.39, MP -63.5 C, VP 100 mm Hg at 10.4 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10362 Blood	1	Not applicable	80 mg/l	Single-drug death, 1975-1980. Autopsy, Maryland State Medical Examiners office. Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Cholecalciferol (8 CI); 9,10-Secocholesta-5,7,10(19)-trien-3-ol, (3beta,5Z,7E)- (9 CI)
67-97-0
C27-H44-O
MW 384.62, MP 84-85 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10263 Blood, serum	2	a) Not given b) Not given	a) <1 ng/ml b) <1 ng/ml	a) Mother, at delivery b) Umbilical cord During pregnancy and lactation took 1 g Ca, vitamin and mineral supplement (400 IU vitamin D, 350 mg Ca) and 100,000 IU vitamin D2/d. Normal winter maternal levels 0.8+/-0.45 ng/ml. Healthy infant. Her 27 yr old mother with familial multiple endocrine adenomatosis (10 yr duration) Ligand binding
BLOOD SERUM; MILK; DELIBERATE EXPOSURE; ADULTS; INFANTS; CALCIUM; MAGNESIUM; VITAMIN D; LACTATION; METABOLITES; DRUGS Greer, F.R.; Hollis, B.W.; Napoli, J.L. 1984 Journal of Pediatrics 105(1):61-64				

Tissue	Cases Exposure Route	Range	Mean	General Information
10264 Blood, serum	20	a) 10.9-62.7 ng/ml b) 9.0-51.0 ng/ml c) 7.2-33.0 ng/ml d) 31.9-101.6 pg/ml e) 25.6-78.5 pg/ml f) 12.6-30.7 pg/ml	a) 36.3+/-17.5 pg/ml b) 23.4+/-13.3 ng/ml c) 15.0+/-6.7 ng/ml d) 59.8+/-23.4 pg/ml e) 52.9+/-16.9 pg/ml f) 20.2+/-5.8 pg/ml	a) Metabolite, 25-hydroxyvitamin D3, in maternal serum before D2 supplementation b) After 20-30 wk (at delivery) of 400 IU/d D2 c) In cord serum at delivery d) Metabolite, 1,25-dihydroxyvitamin D3, in maternal serum before D2 supplementation e) After 20-30 wk (at delivery) of 400 IU/d D2 f) In cord serum at delivery Ratios of each metabolite to its D2 equivalent also reported, and transplacental transfer discussed. Healthy pregnant women and their newborns, Norway
BLOOD SERUM; CONSUMER EXPOSURE; DELIBERATE EXPOSURE; NORWAY; ADULTS; FETUS; NEWBORN; VITAMIN D; METABOLISM; METABOLITES; PREGNANCY; TRANSPLACENTAL TRANSFER; DRUGS Markestad, T.; Aksnes, L.; Ulstein, M.; Aarskog, D. 1984 American Journal of Clinical Nutrition 40:1057-1063				

Cholecalciferol (8 CI); 9,10-Secocholesta-5,7,10(19)-trien-3-ol, (3beta,5Z,7E)- (9 CI)
67-97-0
C27-H44-O
MW 384.62, MP 84-85 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10265 Milk	1 Ingestion	a) Not given b) Not given	a) <1 ng/ml b) <1 ng/ml	a) 14 d lactation, competitive binding assay b) 14 d lactation, UV Mother took 1 gm Ca, vitamin/mineral supplement (400 IU vitamin D, 350 mgCa), and 100,000 IU vitamin D/d. Normal winter levels 0.12+/-0.01 ng/ml. Estimated total vitamin D in milk 7000 IU/L (normal <20 IU/L). Breast-fed for 25 d. Infant intake 4500 IU/d, no symptoms of vitamin D toxicity but Ca levels elevated 27 yr old mother with familial multiple endocrine adenomatosis (10 yr duration) Competitive binding assay; UV
BLOOD SERUM; MILK; DELIBERATE EXPOSURE; ADULTS; INFANTS; CALCIUM; MAGNESIUM; VITAMIN D; LACTATION; METABOLITES; DRUGS Greer, F.R.; Hollis, B.W.; Napoli, J.L. 1984 Journal of Pediatrics 105(1):61-64				

Tissue	Cases Exposure Route	Range	Mean	General Information
10266 Milk				Review of levels of vitamin D and metabolites measured in human breast milk by various methods.
MILK; VITAMIN D; METABOLITES; REVIEW; MEASUREMENT METHODS; LACTATION; NUTRITIONAL DEFICIENCIES; DIETS; DRUGS Makin, H.L.J.; Seamark, D.A.; Trafford, D.J.H. 1983 Archives of Disease in Childhood 58(9):750-753				

Chromium
7440-47-3
Cr
AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10267 Blood	1	Not applicable	a) 5.0 ug/ml	Single-drug death, 1975-1980. Autopsy, Maryland State Medical Examiners office. Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Chromium
7440-67-3
Cr
AtW 51.996, MP 1900 C, BP 2642 C, VP 1 mm Hg at 1616 C, 10 mm Hg at 1840 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10268 Blood, cells	51 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 2.8+/-0.3 ug/dL b) 2.70+/-0.09 ug/dL c) 3.55+/-0.17 ug/dL d) 3.06+/-0.25 ug/dL e) 3.55+/-0.10 ug/dL	a) Initial value b) Placebo, <0.4 ug Cr/d c) Cr-Cl3, 150 ug Cr/d d) Yeastamin-95, 8.35 g/d (18 ug Cr/d) e) Plus brand brewer's yeast, 8.35 g/d (6 ug Cr/d) Each dose given for 4 mo, separated by 2 mo hiatuses. Data also divided into ketosis-prone, ketosis-resistant non-obese, and non-ketosis-prone obese groups. Diabetic outpatients, 40-61 yr old, Wadsworth Veterans Hospital and University of California, Los Angeles AAS
10269 Blood, plasma	51 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.17+/-0.01 ug/dL b) 0.15+/-0.02 ug/dL c) 0.14+/-0.02 ug/dL d) 0.18+/-0.02 ug/dL e) 0.19+/-0.01 ug/dL	a) Initial value b) Placebo, <0.4 ug Cr/d c) Cr-Cl3, 150 ug Cr/d d) Yeastamin-95, 8.35 g/d (18 ug Cr/d) e) Plus brand brewer's yeast, 8.35 g/d (6 ug Cr/d) Each dose given for 4 mo, separated by 2 mo hiatuses. Data also divided into ketosis-prone, ketosis-resistant non-obese, and non-ketosis-prone obese groups. Diabetic outpatients, 40-61 yr old, Wadsworth Veterans Hospital and University of California, Los Angeles AAS
10270 Hair	51 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.51+/-0.05 ug/g b) 0.40+/-0.07 ug/g c) 0.67+/-0.04 ug/g d) 0.64+/-0.04 ug/g e) 0.68+/-0.05 ug/g	a) Initial value b) Placebo, <0.4 ug Cr/d c) Cr-Cl3, 150 ug Cr/d d) Yeastamin-95, 8.35 g/d (18 ug Cr/d) e) Plus brand brewer's yeast, 8.35 g/d (6 ug Cr/d) Each dose given for 4 mo, separated by 2 mo hiatuses. Data also divided into ketosis-prone, ketosis-resistant non-obese, and non-ketosis-prone obese groups. Diabetic outpatients, 40-61 yr old, Wadsworth Veterans Hospital and University of California, Los Angeles Abdominal fullness AAS
10271 Urine	51 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 7.0+/-0.9 ug/d b) 6.1+/-0.7 ug/d c) 8.3+/-0.6 ug/d d) 9.3+/-1.1 ug/d e) 6.02+/-0.8 ug/d	a) Initial value b) Placebo, <0.4 ug Cr/d c) Cr-Cl3, 150 ug Cr/d d) Yeastamin-95, 8.35 g/d (18 ug Cr/d) e) Plus brand brewer's yeast, 8.35 g/d (6 ug Cr/d) Each dose given for 4 mo, separated by 2 mo hiatuses. Data also divided into ketosis-prone, ketosis-resistant non-obese, and non-ketosis-prone obese groups. Diabetic outpatients, 40-61 yr old, Wadsworth Veterans Hospital and University of California, Los Angeles AAS

HAIR; ERYTHROCYTES; BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; COMPARATIVE EVALUATIONS; CHROMIUM; BIOLOGICAL MONITORING; DRUGS
Rabinowitz, M.B.; Gonick, H.C.; Levin, S.R.; Davidson, M.B. 1983 Biological Trace Element Research 5:449-466

Cirramycin A1, 4'-deoxy-
35834-26-5
C81-H51-N-O9
MW 581.76, MP 119-122 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10272 Blood, serum	12 Ingestion Injection	a) 0.041-0.486 ug/ml b) 0.418-0.055 ug/ml c) 3-0.12 ug/ml	a) Not given b) Not given c) Not given	a) 15 min and 1.83+/-0.80 hr after 500 mg, tablets. Level 0.07 ug/ml at 12 hr b) 1.58+/-0.62 and 12 hr after 500 mg oral solution c) 1.5 and 12 hr after 500 mg as 1 hr IV Crossover study. Disposition similar for a) and b). Metabolic patterns also studied after oral dosing of C-14 rosaramicin. Extensive metabolism indicated. Some values estimated from figure. Healthy volunteers HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ANTIBIOTICS; DRUGS; METABOLISM Lin, C.-C.; Chung, M.; Gural, R.; Schuessler, D.; Kim, H.-K.; Radwanski, E.; Marco, A.; DiGiore, C.; Symchowicz, S. 1984 Antimicrobial Agents and Chemotherapy 26(4):522-526				

Tissue	Cases Exposure Route	Range	Mean	General Information
10278 Urine	6 Ingestion	a) 10% cpm b) 30% cpm	a) Not applicable b) Not applicable	a) Percent radioactivity identified as parent compound, 0-24 hr collection b) Percent radioactivity identified as 20-bisureido-metabolite, 0-24 collection Estimated from graph. 500 mg dose, of which 6% excreted in urine in 24 hr (87% dose excreted in feces). Healthy volunteers HPLC
URINE; DELIBERATE EXPOSURE; ADULTS; INFECTION; ANTIBIOTICS; BIOACCUMULATION; METABOLITES; RADIONUCLIDES; DRUGS Lin, C.; Puar, M.S.; Schuessler, D.; Prananik, B.N.; Symchowicz, S. 1984 Drug Metabolism and Disposition 12(1):51-56				

cis-Diammine(1,1-cyclobutanedicarboxylato)platinum (No postings in CHEMLINE).

Tissue	Cases Exposure Route	Range	Mean	General Information
10274 Urine	22 Injection	23-76% % of dose	Not given	With creatinine clearance 20-60 ml/min, urine samples pooled every 4 hr, IV dosage 75-400 mg/sq m, dose adjusted for creatinine clearance levels 6 ml/min-83 ml/min. Patients with refractory tumors and renal dysfunction, 35-83 yr, 40-90% Karnofsky performance status Mild nausea and vomiting Myelosuppression, especially thrombocytopenia AAS
URINE; DELIBERATE EXPOSURE; ADULTS; ANTITUMOR AGENTS; DRUGS; DRUG THERAPY; PLATINUM; BIOACCUMULATION Egorin, M.J.; Van Echo, D.A.; Tipping, S.J.; Olman, E.A.; Whitacre, M.Y.; Thompson, B.W.; Aisner, J. 1984 Cancer Research 44:5432-5438				

Citric acid, tripotassium salt (8 CI); 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, tripotassium salt (9 CI)
866-84-2
C6-H8-O7.3K
MW 306.40

Tissue	Cases Exposure Route	Range	Mean	General Information
10275 Blood, serum	5 Ingestion	a) 23.8+/-1.1-30.8+/-4.0 mg/L b) 26.2+/-1.7-32.4+/-4.5 mg/L c) 25.1+/-1.3-32.0+/-2.5 mg/L d) 23.4+/-2.8-30.2+/-2.8 mg/L e) 24.1+/-2.4-30.8+/-4.2 mg/L	a) Not given b) Not given c) Not given d) Not given e) Not given	a) No drug given b) 20 meq t.i.d., liquid c) 20 meq t.i.d., slow release d) 30 meq b.i.d., liquid e) 30 meq b.i.d., slow release For d), levels at midnight and 6 pm. For a), b), c), e) levels at 6 am and 6 pm. Dose did not significantly change citrate levels at all time periods. Adults, with uric acid or calcium nephrolithiasis, endogenous creatinine clearance >65 ml/min. Normal adult volunteers Enzymatic
10276 Urine	48 Ingestion	a) Not given b) Not given c) Not given d) Not given e) 500-980 mg/day f) 80-520 mg/day g) 110-800 mg/day	a) 60.7+/-18.9 mg/hr b) 43.5+/-21.1 mg/hr c) 1100 mg/d d) 600 mg/d e) Not given f) Not applicable g) Not given	a) From 10-11 am, 20 meq dose at 8 am, 30.2+/-17.5 mg/hr from 6-8 am, 31.7+/-8.3 mg/hr from 8 pm-8 am, 6 cases b) From 10-11 am, no drug, 27.3+/-6.6 mg/hr from 6-8 am, 30.0+/-6.7 mg/hr from 8 pm-8 am, 6 cases c) 95 meq/day dose for 7 consecutive days, maximum levels d 5-7, 6 cases d) 96 meq/day Kcl dose for 7 consecutive days, 7 cases, no significant increase in citrate excretion e) 0-60 meq/day dose, 2 normal subjects f) 0-90 meq/day dose, 1 subject, enteric hyperoxaluria g) 0-90 meq/day dose, 4 subjects, absorptive hypercalciuria or hypocitraturia For e), f), and g), 15, 30, 45, 60, 80, and 90 mg doses given for 1-2 wk duration each. Ranges from dose-response curves. Doses and levels estimated from graph. Slow release tablets reduced circadian variation, excretion patterns graphed. Adults, with uric acid or calcium nephrolithiasis, endogenous creatinine clearance >65 ml/min. Normal adult volunteers Enzymatic
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ADULTS; DRUGS; POTASSIUM; METABOLISM; CIRCADIAN RHYTHMS Pak, C.Y.C.; Skuria, C.; Brinkley, L.; Sakhaee, K. 1984 Journal of Clinical Pharmacology 24:19-26				

Colchicine (8 CI); Acetamide, N-(5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo(a)heptalen-7-yl)-, (S)- (9 CI)
64-86-8
C22-H25-N-O6
MW 399.43, MP 142-150 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10277 Blood	1	Not applicable	250 mg/l	Multiple-drug related death, 1979-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10278 Blood	20	a) Not given b) Not given c) Not given d) Not given	a) 104.0+/-33.0 ug/dl b) 103.6+/-35.0 ug/dl c) 116+/-30.5 ug/dl d) 116+/-27.7 ug/dl	a) 8 patients before oral Zn b) After oral Zn, 600 mg/day for 7d c) 12 controls, d) 8d later Controls given placebo Cirrhotic with chronic encephalopathy, adults, mean age 52, Belgium

BLOOD; DELIBERATE EXPOSURE; BELGIUM; ADULTS; CIRRHOSIS; ZINC; COPPER; TRACE ELEMENTS; METALS; DRUGS
Reding, P; Duchateau, J.; Bataille, C. 1984 Lancet 2(8401):402-404

Tissue	Cases Exposure Route	Range	Mean	General Information
10270 Blood, plasma	9 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 82+/-8.5 ug/dl b) 87.6+/-2.3 ug/dl c) 74.3+/-9.7 ug/dl d) 68.8+/-7.7 ug/dl e) 84.7+/-13.0 ug/dl f) 79.0+/-8.8 ug/dl g) 79.0+/-13.6 ug/dl h) 75.3+/-8.1 ug/dl	a) At start of study b) Same as a), with folic acid c) End of low Zn diet plus 4 mg/d d) Same as b), with folic acid e) End of low Zn diet f) Same as e), with folic acid g) End of low Zn diet plus 30 mg/d h) Same as g), with folic acid b) , c), e), f), and h) 400 ug folic acid every other day. Healthy male volunteers, 19-58 yr old, in Zn-deficiency studies between 1979 and 1981. In closely supervised metabolic unit, carefully controlled diets. AAS

URINE; BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; COMPARATIVE EVALUATIONS; VITAMINS; ZINC; COPPER; IRON
Milne, D.B.; Canfield, W.K.; Mahalko, J.R.; Sandstead, H.H. 1984 American Journal of Clinical Nutrition 39:535-539

Tissue	Cases Exposure Route	Range	Mean	General Information
10280 Blood, serum	11 Ingestion	a) Not given b) Not given c) Not given	a) 111 ug/dl b) 133 ug/dl c) 108 ug/dl S.E.	a) Mother with Zn-deficient infant, before Zn 60 mg/dl for 2 wk b) After therapy c) 8 wk after discontinuing therapy Zn dose and time period not given for 10 other subjects, level before supplementation 172+/-13.8 ug/dl, after 167+/-9.1 ug/dl. 20-34 yr old healthy women, one with Zn deficient infant Diaper rash, loose stools at 2.5 mo, erythematous macular rash in perioral area and cheeks and knees at 5 mo. Dietary supplments in breast-fed very low birth weight infants should include zinc. AAS

BLOOD SERUM; MILK; INFANTS; ADULTS; NUTRITIONAL DEFICIENCIES; COPPER; ZINC; PREMATURE INFANTS; LACTATION; DELIBERATE EXPOSURE; DRUGS
Moore, M.E.C.; Moran, J.R.; Greene, H.L. 1984 Journal of Pediatrics 105(4):600-602

Copper
7440-50-8
Cu
AtW 63.546, MP 1083 C, BP 2595 C, VP 1 mm Hg at 1628 C, 10 mm Hg at 1870 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10281 Blood, serum	57 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given	a) 41+/-22 ug/dL b) 39+/-22 ug/dL c) 38+/-16 ug/dL d) 40+/-15 ug/dL e) 52+/-11 ug/dL f) 49+/-27 ug/dL g) 58+/-22 ug/dL h) 66+/-33 ug/dL i) 70+/-20 ug/dL j) 60+/-20 ug/dL	a) Day 1, enteral, n=14 b) Day 7, enteral, n=13 c) Day 14, enteral, n=11 d) Day 21, enteral, n=8 e) Day 28, enteral, n=5 f) Day 1, parenteral, n=18 g) Day 7, parenteral, n=20 h) Day 14, parenteral, n=20 significantly different from c), $p<0.01$ i) Day 21, parenteral, n=10, significantly different from d), $p<0.01$ j) Day 28, parenteral, n=5 Enterally fed preterm infants, no additional trace element supplements. Totally or partially parenterally fed preterm infants supplemented with Zn and Cu at 350 and 20 ug/kg/d, respectively. Preterm infants in neonatal intensive care unit, Hamilton, Ontario, Canada, Jan-Sept 1982 NA
COPPER; ZINC; SELENIUM; BLOOD SERUM; CANADA; PREMATURE INFANTS; DIETS; INGESTION; DELIBERATE EXPOSURE; TRACE ELEMENTS; DRUGS Friel, J.K.; Gibson, R.S.; Peliowski, A.; Watts, J. 1984 Journal of Pediatrics 104(5):763-768				

Tissue	Cases Exposure Route	Range	Mean	General Information
10282 Urine	6 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.04+/-0.01 md/d b) 0.04+/-0.02 mg/d c) 0.05+/-0.01 mg/d d) 0.05+/-0.01 mg/d e) 0.05+/-0.01 mg/d f) 0.05+/-0.01 mg/d	a) Low Zn diet plus 4 mg Zn/d, 42 d b) Same as a), plus folic acid c) Low Zn diet, 126 d d) Same as c), plus folic acid e) Low Zn diet, plus 30 mg Zn/d, 24 d f) Same as e), plus folic acid b) , d), and f) 400 ug folic acid every other day. Healthy male volunteers, 19-38 yr old, in Zn-deficiency studies between 1970 and 1981. In closely supervised metabolic unit, carefully controlled diets. AAS
URINE; BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; COMPARATIVE EVALUATIONS; VITAMINS; ZINC; COPPER; IRON Milne, D.B.; Canfield, W.K.; Mahalko, J.R.; Sandstead, H.H. 1984 American Journal of Clinical Nutrition 39:535-539				

Cortisol (8 CI); Pregn-4-ene-3,20-dione, 11,17,21-trihydroxy-, (11beta)- (9 CI)
50-56-0
C21-H30-O5
MW 362.47, MP 217-220 C, commercial samples 212-213 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10283 Blood, plasma	a) 8 b) 4 Injection	a) 110-25 ng/ml b) 150-50 ng/ml	a) Not applicable b) Not applicable	a) 0-90 min, peak (110 ng/ml) at 5 min. Normal subjects b) 0-90 min, peak (150 ng/ml) at 5 min. Obese subjects Single dose, 25 mg prednisolone, data from graph. Obese males, age 18-34, normal weight males, age 26-32. HPLC
BLOOD PLASMA; ADIPOSE TISSUE; DELIBERATE EXPOSURE; ADULTS; HORMONES; CORTICOSTEROIDS; BIOACCUMULATION; BIOLOGICAL MONITORING; DRUGS				
Milsap, R.L.; Plaisance, K.I.; Jusko, W.J. 1984 Clinical Pharmacology and Therapeutics 36(6):824-31				

Tissue	Cases Exposure Route	Range	Mean	General Information
10284 Blood, plasma	15 Ingestion	a) 164+/-118-8.4+/-7.7 ng/ml b) 27.3+/-26.5-3.5+/-5.8 ng/ml b) 20.8+/-25.1-1.5+/-5.0 ng/ml c) 20.8+/-25.1-1.5+/-5.0 ng/ml d) 76+/-115-1.5+/-2.9 ng/ml e) 8.1+/-14.1-3.2+/-6.4 ng/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable	a) 0-8 hr, peak (297+/-57 ng/ml) at 30 min after 20 mg suspension dose b) 0-12 hr, peak (219+/-66 ng/ml) at 1 hr following 20 mg dose. 93% of tablet dissolved in 30 min c) 0-12 hr, peak (250+/-66 ng/ml) at 1 hr after 20 mg dose. 40% of tablet dissolved in 30 min d) 0-12 hr, peak (259+/-61 ng/ml) at 1 hr after 20 mg dose. 69% of tablet dissolved in 30 min e) 0-12 hr, peak (280+/-71 ng/ml) at 1.5 hr after 20 mg dose. 8% tablet dissolved in 30 min 4 tablet formulations checked for bioavailibility. No difference. Healthy volunteers, 22-39 yr old HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; CORTICOSTEROIDS; BIOACCUMULATION; BIOAVAILABILITY; BIOLOGICAL MONITORING; DRUGS				
Patel, R.B.; Rogge, M.C.; Selen, A.; Goehl, T.J.; Shah, V.P.; Prasad, V.K.; Welling, P.G. 1984 Journal of Pharmaceutical Sciences 73(7): 964-966				

Cotinine (8 CI); 2-Pyrrolidinone, 1-methyl-5-(3-pyridinyl-,(S)- (9 CI)
486-56-6
C10-H12-N2-O
MW 176.21, 210-211 C at 4 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10285 Blood	124 Inhalation	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 2.4+/-4.9 ng/ml b) 5.5+/-6.7 ng/ml c) 34.9+/-25.7 ng/ml d) 156.4+/-20.1 ng/ml e) 7.9+/-7.6 ng/ml f) 21.4+/-17.3 ng/ml g) 87.4+/-43.4 ng/ml h) 701.0+/-203.4 ng/ml	a) 9 nonsmokers b) 26 passive smokers (husbands smoked) c) 14 moderate smokers (<20 cigarettes/d) d) 5 heavy smokers (>20 cigarettes/d) e) Umbilical cord, nonsmokers f) Umbilical cord, passive smokers g) Umbilical cord, moderate smokers h) Umbilical cord, heavy smokers Healthy pregnant women (>28 wk gestation) RIA
BLOOD; URINE; DELIBERATE EXPOSURE; ADULTS; SMOKING; PREGNANCY; TRANSPLACENTAL TRANSFER				
Mochizuki, M.; Maruo, T.; Masuko, K.; Ohtsu, T. 1984 American Journal of Obstetrics and Gynecology 149(4):413-420				

Cotinine (8 CI); 2-Pyrrolidinone, 1-methyl-5-(3-pyridinyl-,(S)- (9 CI)
486-56-6
C10-H12-N2-O
MW 176.21, 210-211 C at 6 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10266 Blood	8 Injection Inhalation	a) 92-210 ng/ml b) 15-56 ng/ml c) 330-496 ng/ml d) 280-325 ng/ml	a) 156+/-40 ng/ml b) 28+/-13 ng/ml c) 387+/-61 ng/ml d) Not applicable	a) Steady-state, beginning of study b) Steady-state, 40 hr without smoking c) Peak immediately after 1 hr infusion of 4 ug 1 kg/min d) Circadian concentrations, 24 hr, smoking at will. Healthy volunteers, 26-49 yr old, smokers GC
BLOOD; DELIBERATE EXPOSURE; ADULTS; STIMULANTS; DRUGS; DRUG ABUSE; NICOTINE; BIOINDICATORS; BIOACCUMULATION; INHALATION; SMOKING; METABOLITES; METABOLISM; TOBACCOS; POPULATION EXPOSURE Benowitz, N.L.; Kuyt, F.; Jacob, P., III; Jones, R.T.; Osman, A.-L. 1983 Clinical Pharmacology and Therapeutics 34(5):604-611				

Tissue	Cases Exposure Route	Range	Mean	General Information
10267 Blood	144 Inhalation	a) 200-400 ng/ml b) 225-325 ng/ml	a) Not applicable b) Not applicable	a) 10-65 cigarettes/d, levels highly correlated ($p<0.01$) with number of cigarettes smoked b) 0.1-2.0 mg nicotine/cigarette, levels not correlated with Federal Trade Commission estimates of nicotine yield Smokers of low-yield cigarettes did not consume less nicotine. Healthy volunteers, smokers GC
BLOOD; ADULTS; DRUG ABUSE; DRUGS; NICOTINE; BIOACCUMULATION; METABOLITES; HEALTH HAZARDS; INHALATION; TOBACCOS; SMOKING Benowitz, N.L.; Hall, S.M.; Herning, R.I.; Jacob, P., III; Jones, R.T.; Osman, A.-L. 1983 New England Journal of Medicine 309(3):139-142				

Coumarin, 3-(alpha-acetonylbenzyl)-4-hydroxy- (8 CI); 2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)- (9 CI)
81-81-2
C19-H16-O4
MW 308.32, MW 161 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10268 Blood, plasma	10	2.46+/-1.25-2.91+/-1.50 ug/ml	2.60+/-1.31 ug/ml	Unknown doses to patients with valvular replacement, thrombosis or embolus and requiring anticoagulant. Measured over 2 wks. 51-72 yr olds HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; TEXAS; ADULTS; CARDIOVASCULAR DISEASES; HEART DISEASES; ANTICOAGULANTS; DRUG INTERACTION; BIOACCUMULATION Mungall, D.R.; Ludden, T.M.; Hawkins, D.W.; Tabor, T.A.; Penn, D.H.; Crawford, M.H. 1984 Journal of Clinical Pharmacology 24:264-266				

Cyanide
57-12-5
C-N
MW 26.02

Tissue	Cases Exposure Route	Range	Mean	General Information
10289 Blood	a) 6 b) 1	a) 17-100 mg/l b) Not applicable	a) 43.2 mg/l b) 0.03 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related death, 1975-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS				
Caplan, Y.H.; Ottinger, W.E.; Crooke, C.R. 1988 Journal of Analytical Toxicology 7:226-230				

Cyclohexaneglycolic acid, alpha-phenyl-, 4-(diethylamino)-2-butynyl ester (8 CI); Benzeneacetic acid, alpha-cyclohexyl-alpha-hydroxy-, 4-(diethylamino)-2-butynyl ester (9 CI)
5633-20-5
C22-H31-N-O3
MW 357.92

Tissue	Cases Exposure Route	Range	Mean	General Information
10290 Blood, plasma	5 Ingestion Injection	a) 60-706+/-36 nmol/L b) 200-802+/-80 nmol/L c) 96+/-52-80 nmol/L d) 62+/-44-60 nmol/L S.E.	a) Not given b) Not given c) Not given d) Not given	a) 15 min and 1 hr after 10 mg tablet (Cystrin), oral. 150 nmol/L at 8 hr b) After 10 mg, oral, in solution (as hydrochloride). 150 nmol/L at 8 hr c) 5 and 30 min after 28 ug/kg IV infusion (as hydrochloride). GLC assay d) Radioreceptor assay Ranges of means. a) and b) used RRA, measuring antimuscarinic activity as oxybutynin equivalents. Maxima assayed by GLC were 36+/-11 and 24+/-4 nmol/L, respectively. Healthy 20-24 yr olds, wt 50-71 kg GLC; Radioreceptor assay
BLOOD PLASMA; DELIBERATE EXPOSURE; DRUGS; MUSCLE RELAXANTS; COMPARATIVE EVALUATIONS; MEASUREMENT METHODS; METABOLISM				
Aaltonen, L.; Allonen, H.; Iisalo, E.; Juhakoski, A.; Kleimola, T.; Sellman, R. 1984 Acta Pharmacologica et Toxicologica 55:100-103				

Cyclohexanone, 2-(2-chlorophenyl)-2-(methylamino)-, (+-)-
6740-88-1
C13-H16-Cl-N-O
MW 237.74, MP 92-93 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10291 Blood, plasma	a) 31 b) 4 c) 10 d) 8 Injection	a) Not given b) Not given c) Not given d) Not given	a) 9.3+/-0.8 umol/l b) 10.9+/-2.0 umol/l c) 8.2+/-0.6 umol/l d) 9.2+/-1.0 umol/l	a) Controls b) Longterm barbiturate or diazepam-treated patients c) Diazepam premedication d) Clorazepate premedication Steady-state 30 min after 45+/-5-60+/-13 ug/kg/min infusion. 10 mg diazepam rectal or 20 mg clorazepate IV administered 1 hr before surgery. Patients undergoing abdominal surgery, 17 males, 31 females GC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; GASTROINTESTINAL DISEASES; ANESTHETICS; DRUGS; DRUG THERAPY; DRUG INTERACTION; SURGERY; BIOACCUMULATION Idvall, J.; Aronsen, K.F.; Stenberg, P.; Paalzow, L. 1983 European Journal of Clinical Pharmacology 24:337-343				

Tissue	Cases Exposure Route	Range	Mean	General Information
10292 Blood, plasma	8 Injection	a) 27600+/-9430-8.14+/-4.59 ng/ml b) 28500+/-6930-2.71+/-2.04 ng/ml c) 59.4+/-32.1-163+/-61.7 ng/ml d) 36.9+/-31.1-48.3+/-18.4 ng/ml e) 9.10+/-0.71-26.1+/-14.5 ng/ml f) 30.5+/-32.7-0.00+/-0.00 ng/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) 1 min-24 hr, peak at 1 min, placebo pretreatment b) 1 min-24 hr, peak at 1 min, 0.3 mg/kg diazepam pretreatment c) KI metabolite 1 min-24 hr, peak (857+/-173 ng/ml) at 4 hr, placebo pretreatment d) KI metabolite, 1 min-24 hr, peak (951+/-251 ng/ml) at 4 hr, 0.3 mg/kg diazepam pretreatment e) KII metabolite, 1 min-24 hr, peak (118+/-18.3 ng/ml) at 5 hr, placebo pretreatment f) KII metabolite, 1 min-24 hr, peak (151+/-114.3 ng/ml) at 2 hr, 0.3 mg/kg diazepam pretreatment 2.2 mg/kg IV. Diazepam pretreatment resulted in higher levels for clinically important initial 30 min. Healthy volunteer inmates of Jackson State Prison of Southern Michigan, 26-41 yr old GC/MF
10293 Urine	8 Injection	a) 1.48-9.71 mg/24 hr b) 0.15-10.00 mg/24 hr c) 2.92-7.76 mg/24 hr d) 0.37-9.11 mg/24 hr e) 10.2-38.9 mg/24 hr f) 8.2-36.8 mg/24 hr	a) 4.24 mg/24 hr b) 4.19 mg/24 hr c) 4.31 mg/24 hr d) 4.68 mg/24 hr e) 20.7 mg/24 hr f) 22.3 mg/24 hr	a) Placebo pretreatment b) Diazepam pretreatment c) KI metabolite, placebo pretreatment d) KI metabolite, diazepam pretreatment e) KII metabolite, placebo pretreatment f) KII metabolite, diazepam pretreatment 2.2 mg/kg IV. Healthy volunteer inmates of Jackson State Prison of Southern Michigan, 26-41 yr old GC/MF
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; ANESTHETICS; DRUG INTERACTION; TRANQUILIZERS; DIAZEPAMS; BIOACCUMULATION; BIOAVAILABILITY; METABOLITES; DRUGS Domino, E.F.; Domino, S.E.; Smith, R.E.; Domino, L.E.; Goulet, J.R.; Domino, K.E.; Zsigmond, E.K. 1984 Clinical Pharmacology and Therapeutics 36(5):645-653				

Cyclopropylamine, 2-phenyl-, trans-(+-)- (8 CI); Cyclopropanamine, 2-phenyl-, trans-(+-)- (9 CI)
155-09-9
C9-H11-N
MW 133.19, MP 164-166 C, BP 70-80 C at 1.5-1.6 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10294 Blood, plasma	8 Ingestion	a) 40-2 ng/ml b) 50-3 ng/ml c) 60-4 ng/ml d) 70-9 ng/ml	a) Not given b) Not given c) Not given d) Not given	a) (+)-TCP after 10 mg (+)-TCP and 10 mg (-)-TCP, 30 min and 4 hr b) (+)-TCP after 20 mg (+)-TCP, 30 min and 7 hr c) (-)-TCP after 10 mg (+)-TCP ad 10 mg (-)-TCP, 30 min and 7 hr d) (-)-TCP after 20 mg (+)-TCP, 30 min and 8 hr, slight peak at 1.5 hr, 80 ng/ml Estimated from graph. Healthy volunteers
BLOOD PLASMA; DELIBERATE EXPOSURE; MEASUREMENT METHODS; DRUGS Weber, H.; Spahn, H.; Mohrbe, W.; Mutschler, E. 1984 Journal of Pharmacy and Pharmacology 36:50W				

Cyclosporin A
59865-13-3
C62-H111-N11-O12

Tissue	Cases Exposure Route	Range	Mean	General Information
10295 Blood	83	100-1800 ng/ml	Not applicable	100-200 ng/ml associated with 21% rejection, 200-800 ug/ml considered therapeutic range, and above 800 mg/ml was associated with 3% incidence of rejection but 25% incidence of drug toxicity. Clinical complications are correlated with blood levels. Transplantation patients, 76 renal, 5 pancreatic, 2 cardiac. Hepatotoxicity, Nephrotoxicity RIA
BLOOD; DELIBERATE EXPOSURE; KIDNEY DISEASES; HEART DISEASES; DISEASES; GASTROINTESTINAL DISEASES; IMMUNOSUPPRESSANTS; DRUG THERAPY; BIOACCUMULATION; DRUGS Irschik, E.; Tilg, H.; Niederwieser, D.; Gasti, G.; Huber, Ch.; Margreiter, R. 1984 Lancet 2(8404):692-693				

Tissue	Cases Exposure Route	Range	Mean	General Information
10296 Blood	4 Injection	a) 37.5-54.2 ng/ml.hr b) 46.3-76.8 ng/ml.hr	a) 47.2+/-8.1 ng/ml.hr b) 61.9+/-15.8 ng/ml.hr	a) Area under curve measured by HPLC b) Area under curve measured by RIA RIA measures both parent and metabolites. Patients with end-stage renal disease, 48-61 yr old HPLC; RIA
BLOOD; BLOOD PLASMA; DELIBERATE EXPOSURE; SWITZERLAND; ADULTS; KIDNEY DISEASES; DRUG THERAPY; DRUGS; BIOACCUMULATION; COMPARATIVE EVALUATIONS Follath, F.; Wenk, M.; Vozeh, S.; Thiel, G.; Brunner, F.; Loetscher, R.; Lemaire, M.; Nuesbaumer, K.; Niederberger, W.; Wood, A. 1983 Clinical Pharmacology and Therapeutics 34(5):638-643				

Cyclosporin A
59865-13-3
C62-H111-N11-O12

Tissue	Cases Exposure Route	Range	Mean	General Information
10207 Blood	1 Injection	a) 250-2143 ng/ml b) 350-2203 ng/ml	a) Not given b) Not given	a) Arterial b) Venous, $P>0.10$ 100-200 mg at 8 hr intervals. Infused over 1-1.5 hr. Sampled 7x during 2 dialysis periods, times not given. Adult liver transplant patient requiring dialysis HPLC
BLOOD; DELIBERATE EXPOSURE; LIVER DISEASES; IMMUNOSUPPRESSANTS; DRUGS; DRUG THERAPY; TRANSPLANTS; HEMODIALYSIS Venkataramanan, R.; Ptachcinski, R.J.; Burckart, G.J.; Yang, S.L.; Starzl, T.E.; Van Thiel, D.H. 1984 Journal of Clinical Pharmacology 24:528-531				

Tissue	Cases Exposure Route	Range	Mean	General Information
10208 Blood, plasma	a) 1 b) 1 c) 1 d) 1	a) 170-245 ug/l b) 160-300 ug/l c) 50-260 ug/l d) 60-260 ug/l	a) Not given b) Not given c) Not given d) Not given	a) During fall in hemoglobin of 2.6 g/dl b) 5.6 ug/dl c) 2.3 g/dl d) 0.8 g/dl After 3-4 mg/kg/d for 3 mo. In patients a) and b) found to have hemorrhages, blood transfusions and iron supplements corrected levels. Dosage reduced in c) and d) . Rise in levels postulated as effect of reduction in red cell mass. 56-62 yr old primary biliary cirrhosis patients with normal renal function, England RIA
BLOOD PLASMA; DELIBERATE EXPOSURE; UNITED KINGDOM; CASE HISTORIES; ANEMIA; CIRRHOSIS; LIVER DISEASES; DRUGS Robson, S.; Neuberger, J.; Alexander, G.; Williams, R. 1984 British Medical Journal 288:1417-1418				

Tissue	Cases Exposure Route	Range	Mean	General Information
10209 Blood, plasma	3	86-200 mg/L	Not given	From patients on Cyclosporin A (dose not stated). Poor correlation between plasma and whole blood concentrations. Results temperature dependent. Post-transplant patients RIA
BLOOD PLASMA; DELIBERATE EXPOSURE; DRUGS; MEASUREMENT METHODS Yatscoff, R.W.; Rush, D.N.; Jeffery, J.R. 1984 Clinical Chemistry 30(11):1812-1814				

Cyclosporin A
59665-18-8
C62-H111-N11-O12

Tissue	Cases Exposure Route	Range	Mean	General Information
10300 Blood, plasma	22 Ingestion	a) Not given b) Not given c) Not given	a) 205+/-28 ng/ml b) 482+/-61 ng/ml c) 210+/-21 ng/ml	a) Prior to IV therapy for rejection b) After therapy c) 2 wk after IV therapy Dose 0.5 g methylprednisolone day 1 and 0.25 g on day 3-5. Also on maintainence immunosupression: 4-15 mg/kg/d cyclosporin and 10-45 mg/d methylprednisolone, orally. a) significantly different from b)-$p<0.001$. Renal transplant patients undergoing rejection RIA

BLOOD PLASMA; DELIBERATE EXPOSURE; IMMUNOSUPPRESSANTS; TRANSPLANTS; DRUGS; DRUG THERAPY
Klintmalm, G.; Sawe, J. 1984 Lancet 1(8379):731

Tissue	Cases Exposure Route	Range	Mean	General Information
10301 Blood, plasma	4 Injection	a) 1100-50 ng/ml b) 1500-50 ng/ml	a) Not applicable b) Not applicable	a) 0-12 hr, peak (1100 ng/ml) after 3.5 mg/kg infusion, measured by HPLC b) 0-12 hr, peak (1500 ng/ml) after 3.5 mg/kg infusion, measured by RIA Temperatures at which plasma is separated from whole blood affects sequestering of drug in RBCs. Data considered unreliable. Patient with end-stage renal disease HPLC; RIA

BLOOD; BLOOD PLASMA; DELIBERATE EXPOSURE; SWITZERLAND; ADULTS; KIDNEY DISEASES; DRUG THERAPY; DRUGS; BIOACCUMULATION; COMPARATIVE EVALUATIONS
Follath, F.; Wenk, M.; Vesch, S.; Thiel, G.; Brunner, F.; Loetscher, R.; Lemaire, M.; Nussbaumer, K.; Niederberger, W.; Wood, A. 1983 Clinical Pharmacology and Therapeutics 34(5):638-643

Tissue	Cases Exposure Route	Range	Mean	General Information
10302 Blood, serum	7 Ingestion Injection	102-454 ng/ml	Not given	4-84 (median 12) d after start of therapy. Measured at time of seizure. Initial dose 3 mg/kg/d IV or 12.5 mg/kg/d orally, adjusted to maintain trough of 200-400 ng/ml Mg levels below normal. 13-35 yr old bone-marrow transplant recepients, 12/81-3/84, Fred Hutchinson Cancer Research Center, Seattle, WA RIA

BLOOD SERUM; DELIBERATE EXPOSURE; ADOLESCENTS; ADULTS; MAGNESIUM; IMMUNOSUPPRESSANTS; DRUGS; DRUG THERAPY; DRUG INTERACTION
Thompson, C.B.; June, C.H.; Sullivan, K.M.; Thomas, E.D. 1984 Lancet 2(8412):1116-1120

Cytosine, 1-beta-D-arabinofuranosyl- (8 CI); 2(1H)-Pyrimidinone, 4-amino-1-beta-D-arabinofuranosyl- (9 CI)
147-94-4
C9-H13-N3-O5
MW 243.22, MP 212-218 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10803 Cerebrospinal fluid	7 Injection	a) 1200-4 uM/ml b) 30-4 uM/ml c) Not applicable	a) Not applicable b) Not applicable c) 75 uM/ml	a) Parent drug, ventricular, 15 min-24 hr b) Major metabolite, uracil arabinoside, ventricular, 14 min-24 hr, peak 40 uM/ml at 2 hr c) Parent drug, lumbar, 2 cases, 3 hr 30 mg intraventricular dose via ommaya reservoir (source of maintenance therapy for 1-5 mo). 8-14 yr olds with acute lymphoblastic leukemia and meningeal metastases in complete remission HPLC
CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; LEUKEMIA; ANTITUMOR AGENTS; DRUGS; DRUG THERAPY				
Zimm, S.; Collins, J.M.; Miser, J.; Chatterji, D.; Poplack, D.G. 1984 Clinical Pharmacology and Therapeutics 35(6):826-830				

D-erythro-D-galacto-Octopyranoside, methyl 6,8-dideoxy-6-(1-methyl-4-propyl-L-2-pyrrolidinecarboxamido)-1-thio-, trans-alpha- (8 CI); D-erythro-alpha-D-galacto-Octopyranoside, methyl 6,8-dideoxy-6-(((1-methyl-4-propyl-2-pyrrolidinyl)carbonyl)amino)-1-thio-, (2S-trans)- (9 CI)
154-21-2
C18-H34-N2-O6-S
MW 406.56

Tissue	Cases Exposure Route	Range	Mean	General Information
10804 Blood, serum	Injection	7.13+/-1.84-1.23+/-0.49 ug/ml	Not given	1-12 hr after 300 mg IM, peak at 1 hr. Range of means. Children 5-8 yr, 17-34 kg Bioassay
10805 Tonsil	Injection	1.99+/-0.84-0.43+/-0.16 mg/g	Not given	1-12 hr after 300 mg IM, peak 2.33+/-0.9 at 3 hr. Range of means. Children 5-8 yr, 17-34 kg Bioassay
BLOOD SERUM; TONSILS; DELIBERATE EXPOSURE; CHILDREN; ANTIBIOTICS; DRUGS; SURGERY				
Marcenac, P.M.L.; Bonari, A.J.; Chierico, A.; De Berdaguer, R.P. 1983 Medicina 43:410-414				

D-Streptamine, O-3-amino-3-deoxy-alpha-D-glucopyranosyl-(1-6)-O-(6-amino-6-deoxy-alpha-D-glucop yranosyl-(1-4))-N(1)-(4-amino-2-hydroxy-1-oxobutyl)-2-deoxy-, (S)-
37517-28-5
C22-H43-N5-O13
MW 585.62, MP 203-204 C (sesquihydrate)

Tissue	Cases Exposure Route	Range	Mean	General Information
10306 Bile	28 Injection	a) 3-8.9 ug/ml b) 0.43-4.8 ug/ml c) 0.6-4.2 ug/ml d) 0.0-6.6 ug/ml e) 0.0-10 ug/ml f) 0.38-1.0 ug/ml	a) 5.5+/-1.7 ug/ml b) 2.0+/-1.4 ug/ml c) 1.6+/-1.3 ug/ml d) 1.3+/-2.05 ug/ml e) 2.3+/-3.4 ug/ml f) 0.55+/-0.31 ug/ml	a) Dose immediately prior to surgery. Gall bladder bile b) 6 hr prior to surgery c) 11 hr prior to surgery d) Immediately prior to surgery. Common duct bile e) 6 hr prior to surgery f) 11 hr prior to surgery 500 mg IV or IM. Bile samples taken during surgery. Levels given for 4 patients who had T-tube drainage and additional doses. 22-74 yr olds undergoing cholecystectomy Paper disc agar diffusion
BLOOD SERUM; BILE; GALL BLADDER; DELIBERATE EXPOSURE; ADULTS; GASTROINTESTINAL DISEASES; ANTIBIOTICS; DRUGS; SURGERY LeFrock, J.L.; Schell, R.F.; Siekind, S.; Carr, B.B. 1984 Journal of Clinical Pharmacology 24:247-254				

Tissue	Cases Exposure Route	Range	Mean	General Information
10307 Blood, serum	a) 10 b) 10 c) 8	a) 31.2+/-2.3-3.0+/-0.6 ug/ml b) 14.1+/-4.7-1.3+/-0.3 ug/ml c) 13.1+/-5.6-0.9+/-0.6 ug/ml	a) Not given b) Not given c) Not given	a) 0.5 and 8 hr after 7.5 mg/kg IV b) 0.5 and 8 hr after 7.5 mg/kg intrapleural (chest tube was clamped 30 min before resuming suction) c) 1 and 8 hr after 7.5 mg/kg intrapleural (chest tube was clamped 2 hr before resuming suction). 26-73 yr olds (mean 54.2 yr), lobectomy or pneumomectomy 2-7 d prior to dose RIA
PLEURAL FLUID; BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; ANTIBIOTICS; DRUGS Thys, J.P.; Serruys-Schoutens, E.; Rocmans, P.; Herchuelz, A.; Vanderlinden, M.P.; Youassowsky, E. 1984 Chest 85(4):502-505				

Tissue	Cases Exposure Route	Range	Mean	General Information
10308 Blood, serum	28 Injection	a) 14-22 ug/ml b) 0.53-13 ug/ml c) 0.24-3.6 ug/ml	a) 16.5+/-3.2 ug/ml b) 5.9+/-4.2 ug/ml c) 1.2+/-1.1 ug/ml	a) Immediately prior to surgery b) 6 hr prior to surgery c) 11 hr prior to surgery 500 mg IV or IM. Serum sampled before, 1, 6, 12 hr after dose. Levels given for 4 patients who had T-tube drainage and additional doses. 22-74 yr olds undergoing cholecystectomy Paper disc agar diffusion
BLOOD SERUM; BILE; GALL BLADDER; DELIBERATE EXPOSURE; ADULTS; GASTROINTESTINAL DISEASES; ANTIBIOTICS; DRUGS; SURGERY LeFrock, J.L.; Schell, R.F.; Siekind, S.; Carr, B.B. 1984 Journal of Clinical Pharmacology 24:247-254				

D-Streptamine, O-2-amino-2-deoxy-alpha-D-glucopyranosyl-(1-6)-O-(6-amino-6-deoxy-alpha-D-glucop yranosyl-(1-4))-N(1)-(4-amino-2-hydroxy-1-oxobutyl)-2-deoxy-, (S)-
37517-28-5
C22-H43-N5-O13
MW 585.62, MP 203-206 C (sesquihydrate)

Tissue	Cases Exposure Route	Range	Mean	General Information
10309 Blood, serum	1 Injection	a) 30-8 mg/l b) 8-20 mg/l	a) Not given b) Not given	a) 40 min and 17 hr after 433 mg as 30 min IV, during first dose interval, patient with decreased, stable renal function. Level 17 mg/l at 20 min b) Same patient, 0 and 40 min after 257 mg as 30 min IV, during last dose interval. Level 11 mg/l at 12 hr In additional kinetic studies, half-life in normals, 2.27-2.33 hr. In 6 with renal insufficiency, 11.2 hr (1st dose interval), 21.5 hr (last dose interval). Patients, mean age 46, with severe systemic infections Bioassay
BLOOD SERUM; DELIBERATE EXPOSURE; INFECTION; ANTIBIOTICS; DRUGS; AMINOGLYCOSIDES; METABOLISM; DRUG THERAPY				
Blaser, J.; Ruttimann, S.; Bhend, H.; Luthy, R. 1983 Antimicrobial Agents and Chemotherapy 23(6):888-891				

Tissue	Cases Exposure Route	Range	Mean	General Information
10310 Gall bladder	23 Injection	a) 2.3-3.0 ug/ml b) 0-6 ug/ml c) Not applicable	a) 2.7+/-0.29 ug/ml b) 1.6+/-2.3 ug/ml c) 0.0 ug/ml	a) Immediately prior to surgery b) 6 hr prior to surgery c) 11 hr prior to surgery 500 mg IV or IM. 22-74 yr olds undergoing cholecystectomy Paper disc agar diffusion
BLOOD SERUM; BILE; GALL BLADDER; DELIBERATE EXPOSURE; ADULTS; GASTROINTESTINAL DISEASES; ANTIBIOTICS; DRUGS; SURGERY				
LeProck, J.L.; Schell, R.F.; Sichind, S.; Carr, B.B. 1984 Journal of Clinical Pharmacology 24:247-254				

Tissue	Cases Exposure Route	Range	Mean	General Information
10311 Pleural fluid	a) 10 b) 10 c) 5	a) 13-5.5+/-0.6 ug/ml b) 3374+/-983-288+/-145 ug/ml c) 1902+/-356-454+/-259 ug/ml	a) Not given b) Not given c) Not given	a) 0.5-1 and 7-8 hr after 7.5 mg/kg IV b) 0.5-1 and 7-8 hr after 7.5 mg/kg intrapleural (chest tube was clamped 30 min before resuming suction) c) 2-3 and 7-8 hr after 7.5 mg/kg intrapleural (chest tube was clamped 2 hr before resuming suction). 26-73 yr olds (mean 54.2 yr), lobectomy or pneumomectomy 2-7 d prior to dose RIA
PLEURAL FLUID; BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; ANTIBIOTICS; DRUGS				
Thys, J.P.; Serruys-Schoutens, E.; Rocmans, P.; Herchuels, A.; Vanderlinden, M.P.; Yourassowsky, E. 1984 Chest 85(4):502-505				

D-Streptamine, O-2-deoxy-4-C-methyl-3-(methylamino)-beta-L-arabinopyranosyl-(1-6)-O-(26-diamino -2,3,4,6-tetradeoxy-alpha-D-glycero-hex-4-enopyranosyl-(1-4))-2-deoxy-N(1)-ethyl -

56391-56-1
C21-H41-N5-O7
MW 475.57

Tissue	Cases Exposure Route	Range	Mean	General Information
10812 Blood, plasma	10 Injection	0.5-0.5 ug/ml	Not applicable	10 min-8 hr, peak (.13 ug/ml) KT 0.5 hr after 1.7 mg/kg/d for 5 d. Healthy volunteers, 22.0+/-3.0 yr old, wt 75.5+/-8.0 kg R/A
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION Laskin, O.L.; Longstreth, J.A.; Smith, C.R.; Lietman, P.S. 1983 Clinical Parmacology and Therapeutics 34(5):644-650				

Tissue	Cases Exposure Route	Range	Mean	General Information
10813 Blood, serum	6 Injection	a) 6.6-9.0 mg/l b) 6.5-11.2 mg/l c) 0.15-0.55 mg/l d) 0.63-1.72 mg/l	a) 8.0 mg/l b) 8.6 mg/l c) 0.35 mg/l d) 1.11 mg/l	a) Peak, b.i.d. for 2 d b) Peak, t.i.d. for 2 d c) Trough, 12 hr after b.i.d. for 2 d d) Trough, 8 hr after b.i.d. for 2 d 2 mg/kg IM. Healthy volunteers, 22-26 yr, wt 56-66 kg Radio-enzymatic
10814 Urine	6 Injection	a) Not given b) Not given c) Not given d) Not given	a) 75.6% b) 76.4% c) 82.5% d) 85.2%	a) 48 hr, b.i.d. b) 72 hr, b.i.d. c) 48 hr, t.i.d. d) 72 hr, t.i.d. % indicated daily dose of 2 mg/kg IM recovered. Healthy volunteers, 22-26 yr, wt 56-66 kg Radio-enzymatic
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; SWITZERLAND; INFECTION; ANTIBIOTICS; DRUG THERAPY; DRUGS; BIOACCUMULATION; URINE Blaser, J.; Rieder, H.; Niederer, P.; Luthy, R. 1983 European Journal of Clinical Pharmacology 24:399-406				

Tissue	Cases Exposure Route	Range	Mean	General Information
10815 Urine	10 Injection	a) Not given b) Not given c) Not given	a) 84.7+/-21.5 % b) 69.0+/-19.6 % c) 79.5+/-19.9 %	a) Day 1 of administration b) Day 5 of administration c) Day 10 of administration 0-8 hr, % recovery. Dose was 1.7 mg/kg/d. Healthy volunteers, 22.0+/-3.0 yr old, wt 75.5+/-8.0 kg R/A
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION Laskin, O.L.; Longstreth, J.A.; Smith, C.R.; Lietman, P.S. 1983 Clinical Parmacology and Therapeutics 34(5):644-650				

delta(9)-Tetrahydrocannabinol-11-oic acid glucuronide (No postings in CHEMLINE).

Tissue	Cases Exposure Route	Range	Mean	General Information
10816 Blood, plasma	Ingestion	0-9.1+/-2.7 ng/ml	Not applicable	0-72 hr, Peak (107+/-16 ng/ml) at 4 hr. Initial dose 20 mg delta-9-THC in cannabis resin. Volunteers, 27-34 yr, good health and no previous experience with cannabis HPLC; RIA
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; UNITED KINGDOM; ADULTS; DRUG ABUSE; DRUGS; PSYCHOTROPIC DRUGS; FORENSIC MEDICINE; ALKALOIDS; VOLATILE ORGANIC COMPOUNDS; BIOACCUMULATION; BIOLOGICAL MONITORING; METABOLITES Law, B.; Mason, P.A.; Moffat, A.C.; Gleadle, R.I.; King, L.J. 1984 Journal of Pharmacy and Pharmacology 36:289-294				

Dibens(b,e)oxepin-delta(11(6H),gamma)-propylamine, N-methyl- (8 CI); 1-Propanamine, 3-dibens(b,e)oxepin-11(6H)-ylidene-N-methyl- (9 CI)
1226-56-5
C18-H19-N-O
MW 265.34

Tissue	Cases Exposure Route	Range	Mean	General Information
10317 Blood	a) 16 b) 2 c) 4 d) 10 e) 6	a) 0.2-13 mg/l b) 0.12-0.7 mg/l c) 0.3-1.1 mg/l d) 0.3-13 mg/l e) 0.2-6.4 mg/l	a) 3.5 mg/l b) 0.4 mg/l c) 0.56+/-0.36 mg/l d) 3.7 mg/l e) 3.3 mg/l	a) Single-drug death, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths, 1970-1980 d) Single-drug deaths, without ethanol, 1975-1980 e) Single-drug deaths, with ethanol, 1975-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooke, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Dibens(b,e)oxepin-delta(11(6H),gamma)-propylamine, N,N-dimethyl- (8 CI); 1-Propanamine, 3-dibens(b,e)oxepin-11(6H)-ylidene-N,N-dimethyl- (9 CI)
1668-19-5
C19-H21-N-O
MW 279.37, BP 154-157 C at 0.03 mm Hg, 260-270 C at 0.2 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10318 Blood	1 Ingestion	Not applicable	3.3 mg/L	1 hr after 2500 mg. Ratio of cis- and trans-10:90. Also took 500 mg chlorazepate. Patient died 45 min after admission. Drug ingested 15:85% mix of cis:trans isomers. 24 yr old male Comatose, hypotonia without tendon reflexes, myotic pupils, shallow respiration, generalized epileptic seizures Blood pressure 80/40 mm Hg, accelerated idioventricular rhythm, slightly congested liver, renal glomeruli, tubulin TLC
BLOOD; URINE; KIDNEYS; LIVER; HEART; AUTOPSIES; CASE HISTORIES; DRUGS; DRUG ABUSE; ANTIDEPRESSIVE AGENTS; MEASUREMENT METHODS; METABOLITES Cordonnier, J.; Heyndrickx, A.; Jordaens, L.; Brijs, R.; De Keyser, R. 1983 Journal of Analytical Toxicology 7:161-164				

Dibenz(b,e)oxepin-delta(11(6H),gamma)-propylamine, N,N-dimethyl- (8 CI); 1-Propanamine, 3-dibenz(b,e)oxepin-11(6H)-ylidene-N,N-dimethyl- (9 CI)
1668-19-5
C19-H21-N-O
MW 279.37, BP 154-157 C at 0.03 mm Hg, 260-270 C at 0.2 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10810 Blood	a) 19 b) 3 c) 5 d) 13 e) 6	a) 0.4-150 mg/l b) 0.4-0.7 mg/l c) 1.2-77 mg/l d) 0.4-150 mg/l e) 4.5-30 mg/l	a) 22.6 mg/l b) 0.4 mg/l c) 17.0+/-33.6 mg/l d) 26.9 mg/l e) 13.4 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths, 1979-1980 d) Single-drug deaths, without ethanol, 1975-1980 e) Single-drug deaths, with ethanol, 1975-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooke, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Tissue	Cases Exposure Route	Range	Mean	General Information
10820 Heart	1 Ingestion	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 3.6 mg/kg b) 0.10 mg/kg c) 2.7 mg/kg d) 0.46 mg/kg	a) Left ventricle, parent drug b) Metabolite, desmethyldoxepin, ratio to a), 3:97 c) Ventricular septum, parent drug d) Metabolite, desmethyldoxepin, ratio to c), 17:83 1 hr after 2500 mg. Also took 500 mg chlorazepate. Patient died 45 min after admission. Ingested 15:85 mix of cis:trans isomers. Ratio of cis-trans in a) and c) 9:91. 24 yr old male Comatose, hypotonia without tendon reflexes, myotic pupils, shallow respiration, generalized epileptic seizures Blood pressure 80/40 mm Hg, accelerated idioventricular rhythm, slightly congested liver, renal glomeruli, tubulin TLC
10821 Kidney	1 Ingestion	a) Not applicable b) Not applicable	a) 4.3 mg/kg b) 0.52 mg/kg	a) Parent drug, ratio of cis-and trans-11:89 b) Metabolite, desmethyldoxepin, ratio to a) 12:88 1 hr after 2500 mg. Also took 500 mg chlorazepate. Patient died 45 min after admission. Ingested 15:85 min of cis:trans isomers. 24 yr old male Comatose, hypotonia without tendon reflexes, myotic pupils, shallow respiration, generalized epileptic seizures Blood pressure 80/40 mm Hg, accelerated idioventricular rhythm, slightly congested liver, renal glomeruli, tubulin TLC

(next page)

Dibenz(b,e)oxepin-delta(11(6H),gamma)-propylamine, N,N-dimethyl- (8 CI); 1-Propanamine, 3-dibenz(b,e)oxepin-11(6H)-ylidene-N,N-dimethyl- (9 CI)
1668-19-5
C19-H21-N-O
MW 279.37, BP 154-157 C at 0.03 mm Hg, 260-270 C at 0.2 mm Hg

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
10322 Liver	1 Ingestion	a) Not applicable b) Not applicable	a) 63.8 mg/kg b) 4.47 mg/kg	a) Parent drug, ratio of cis-and trans-13:87 b) Metabolite, desmethyldoxepin, ratio to a) 7:93 1 hr after 2500 mg. Also took 500 mg chlorazepate. Patient died 45 min after admission. Ingested 15:85 mix of cis:trans isomers. 24 yr old male Comatose, hypotonia without tendon reflexes, myotic pupils, shallow respiration, generalized epileptic seizures Blood pressure 80/40 mm Hg, accelerated idioventricular rhythm, slightly congested liver, renal glomeruli, tubulin TLC
10323 Urine	1 Ingestion	Not applicable	1.4 mg/L	1 hr after 2500 mg. Ratio of cis- and trans-8:92. Also took 500 mg chlorazepate. Patient died 45 min after admission. Drug ingested 15:85% mix of cis:trans isomers. 24 yr old male Comatose, hypotonia without tendon reflexes, myotic pupils, shallow respiration, generalized epileptic seizures Blood pressure 80/40 mm Hg, accelerated idioventricular rhythm, slightly congested liver, renal glomeruli, tubulin TLC
BLOOD; URINE; KIDNEYS; LIVER; HEART; AUTOPSIES; CASE HISTORIES; DRUGS; DRUG ABUSE; ANTIDEPRESSIVE AGENTS; MEASUREMENT METHODS; METABOLITES Cordonnier, J.; Heyndrickx, A.; Jordaens, L.; Brije, R.; De Keyser, R. 1983 Journal of Analytical Toxicology 7:161-164				

Dibenz(b,f)(1,4)oxazepin-8-ol, 2-chloro-11-(1-piperazinyl)-
61443-78-5
C17-H16-Cl-N3-O2
MW 329.81

Tissue	Cases Exposure Route	Range	Mean	General Information
10324 Blood, serum	a) 1 b) 1 c) 1 d) 1 e) 1 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 640 ug/L b) 405 ug/L c) 900 ug/L d) 1480 ug/L e) 685 ug/L	a) Unknown amount taken b) 800 mg + 2 other drugs c) 2000 mg + 2 other drugs d) 1330 mg loxapine, no amoxapine, 5 other drugs e) 1000 mg loxapine, & amoxapine & 4 other drugs Major metabolite of amoxapine. Data reported are maximum levels, measured at admission. Elimination was 1st order. Other drugs included: propoxyphene, zomepirac, acetaminophen, ethanol, phenytoin, doxepin, chlordiazepoxide, caffeine, nicotine, phenylpropanolamine, phenmetrazine. 22-42 yr old women, drug overdoses, admitted to U of Cincinnati Hospital, OH HPLC
SUICIDE; METABOLITES; ANTIDEPRESSIVE AGENTS; DELIBERATE EXPOSURE; DRUGS; METABOLISM; CASE HISTORIES; URINE; BLOOD SERUM Tasset, J.J.; Pesce, A.J. 1984 Journal of Analytical Toxicology 8:124-128				

Dibenz(b,f)(1,4)oxazepine, 2-chloro-11-(1-piperazinyl)-
14028-44-5
C17-H16-Cl-N3-O
MW 313.79, MP 178-176 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10326 Blood, serum	a) 1 b) 1 c) 1 d) 1 e) 1 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 625 ug/L b) 308 ug/L c) 2900 ug/L d) 1560 ug/L e) 475 ug/L	a) Unknown amount taken b) 800 mg + 2 other drugs c) 2000 mg + 2 other drugs d) 1330 mg loxapine, no amoxapine, 5 other drugs e) 1000 mg loxapine, & amoxapine & 4 other drugs Data reported are maximum levels, measured at admission. Elimination was 1st order. Other drugs included: propoxyphene, zomepirac, acetaminophen, ethanol, phenytoin, doxepin, chlordiazepoxide, caffeine, nicotine, phenylpropanolamine, phenmetrazine. 22-42 yr old women, drug overdoses, admitted to U of Cincinnati Hospital, OH Coma, seizures, cardiac abnormalities HPLC

SUICIDE; METABOLITES; ANTIDEPRESSIVE AGENTS; DELIBERATE EXPOSURE; DRUGS; METABOLISM; CASE HISTORIES; URINE; BLOOD SERUM
Tasset, J.J.; Pesce, A.J. 1984 Journal of Analytical Toxicology 8:124-128

Tissue	Cases Exposure Route	Range	Mean	General Information
10326 Blood, serum	1 Ingestion	a) 1420-20 ng/ml b) 834-88 ng/ml c) 100-8 ng/ml	a) Not given b) Not given c) Not given	a) About 12 and 80 hrs after 850 mg b) Metabolite, 8-hydroxyamoxapine c) Metabolite, 7-hydroxyamoxapine, 12 and 32 hrs. Therapy included IV fluids, gastric lavage, activated charcoal, MG-citrate. 56-yr old overdose victim Semicomatose state, hypothermia, mild hypertension. Generalized tonic-clonic seizure

BLOOD SERUM; DELIBERATE EXPOSURE; CASE HISTORIES; DEPRESSION; ANTIDEPRESSIVE AGENTS; DRUG ABUSE; DRUGS; LAVAGE; METABOLITES
Lopez, L.M.; Russell, W.L. 1983 Clinical Toxicology 20(1):101-105

Dibenzo(c,f)pyrazino(1,2-a)azepine, 1,2,3,4,10,14b-hexahydro-2-methyl-
24219-97-4
C18-H20-N2
MW 264.37

Tissue	Cases Exposure Route	Range	Mean	General Information
10327 Blood, plasma	1 Ingestion	Not applicable	27 ug/l	2 hr after 40 mg dose. Volunteer LC

BLOOD PLASMA; DELIBERATE EXPOSURE; DEPRESSION; ANTIDEPRESSIVE AGENTS; DRUGS; DRUG THERAPY
Wong, S.H.Y.; Waugh, S.W.; Dras, M.; Jain, N. 1984 Clinical Chemistry 30(2):230-233

Dibenzo(c,f)pyrazino(1,2-a)azepine, 1,2,3,4,10,14b-hexahydro-2-methyl-
24219-97-4
C18-H20-N2
MW 264.37

Tissue	Cases Exposure Route	Range	Mean	General Information
10328 Blood, plasma	8 Ingestion	40-10 ng/ml	Not applicable	2-48 hr, peak (100 ng/ml) at 3 hr after 60 mg. Patients with primary affective disorder of depression, 6 females, 2 males, 25-42 yr old HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; CANADA; ADULTS; DEPRESSION; ANTIDEPRESSIVE AGENTS; DRUGS; DRUG THERAPY; BIOACCUMULATION Hrdina, P.D.; Lapierre, Y.D.; McIntosh, B.; Oyewumi, L.K. 1983 Clinical Pharmacology and Therapeutics 33(6):757-762				

Diethylamine, N-nitroso- (8 CI); Ethanamine, N-ethyl-N-nitroso- (9 CI)
55-18-5
C4-H10-N2-O
MW 102.14, BP 175-177 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10329 Blood, plasma	12 Injection Ingestion	a) Not given b) Not given c) 3-3 nmol/l d) 4-4 nmol/l	a) 156+/-22 nmol/l b) 214+/-21 nmol/l c) Not applicable d) Not applicable	a) Peak 1.0+/-0.3 hr after 40 mg oral b) Peak 2.6+/-0.4 hr after 40 mg b.i.d. for 5 d c) Labeled metabolites, 0.5-24 hr, peak (8.5 nmol/l) 7 hr after 40 mg oral plus 0.14 mg [H-3]-parent IV as tracer d) Labeled metabolites, 0.5-24 hr, peak (10 nmol/l) 7 hr after 40 mg b.i.d. for 5 d and 0.14 mg [H-3]-parent IV as tracer. Patients with congestive heart failure, 6 males, 6 females, 46-67 yr old HPLC; Scintillation counting
10330 Urine	12 Injection Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 31.3+/-1.4% b) 56.8+/-2.5% c) 7.2+/-0.3% d) 0.0+/-0.1% e) 29.5+/-3.8% f) 55.2+/-2.7% g) 6.3+/-0.4% h) 1.0+/-0.2%	a) Parent drug, single dose b) Sulphate ester metabolite, single dose c) Glucuronide metabolite, single dose d) Acidic metabolite e) Parent drug, multiple dose f) Sulphate ester metabolite, multiple dose g) Glucuronide metabolite, multiple dose h) Acidic metabolite, multiple dose a-d) % radioactivity excreted in 48 hr after IV tracer, e)-h) % radioactivity excreted in 36 hr after 40 mg b.i.d. for 5 d and IV tracer. Patients with congestive heart failure, 6 males, 6 females, 46-67 yr old HPLC; Scintillation counting
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; SWEDEN; ADULTS; HEART DISEASES; CARDIOVASCULAR DISEASES; BETA BLOCKER; DRUGS; DRUG THERAPY; DRUG INTERACTION; BIOACCUMULATION; METABOLITES; RADIONUCLIDES Dahlstrom, U.; Graffner, C.; Jonsson, U.; Hoffmann, K.-J.; Karlsson, E.; Lagerstrom, P.-O. 1983 European Journal of Clinical Pharmacology 24:495-502				

Difunisal (No postings in CHEMLINE).
C13-H8-F2-O3
MW 250.20, MP 210-211 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10351 Blood, plasma	2 Ingestion	a) 0.1-30.6 ug/ml b) 0.1-99.3 ug/ml	a) Not given b) Not given	a) 0.5-72 hr after 250 mg, peak 2.1-3.5 hr b) 0.5-110 hr after 750 mg, peak 3.5-4.0 hr Fasting until 4 hr post dose. Disproportionate increase in area under plasma concentration-time curves and reduction in plasma clearance, after 750 mg dose. Some values estimated from figures. Healthy volunteers, Australia HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; AUSTRALIA; ANALGESICS; DRUGS Ray, J.E.; Day, R.O. 1983 Journal of Pharmaceutical Sciences 72(12):1403-1405				

Tissue	Cases Exposure Route	Range	Mean	General Information
10352 Blood, serum	24 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 23.3+/-5.6 b) 57.6+/-14.7 c) 91.8+/-21.3 d) 127.9+/-27.5	a) 250 mg/day for 14 days b) 500 mg/day for 14 days c) 750 mg/day for 14 days d) 1000 mg/day for 14 days Measured 4 hr after last dose. Patients with osteoarthritis, 52-81 yr old HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; AUSTRALIA; ADULTS; ARTHRITIS; ANALGESICS; DRUG THERAPY; DRUGS; BIOACCUMULATION Meffin, P.J.; Brooks, P.M.; Bertouch, J.; Veenendaal, J.R.; Harrington, B.J. 1983 Clinical Pharmacology and Therapeutics 33(6):813-821				

Digitoxin (8 CI); Card-20(22)-enolide, 3-((O-2,6-dideoxy-beta-D-ribo-hexopyranosyl-(1-4)-O-2,6-dideoxy-beta-D-ribo-hexo pyranosyl-(1-4)-2,6-dideoxy-beta-D-ribo-hexopyranosyl)oxy)-14-hydroxy-, (3beta,5beta)- (9 CI)
71-63-6
C41-H64-O13
MW 764.92, MP 256-257 C (anhydrous)

Tissue	Cases Exposure Route	Range	Mean	General Information
10353 Blood, serum	a) 5 b) 5 c) 6 d) 11 Injection Ingestion	a) 100-500 ng/ml b) 20-90 ng/ml c) 23-50 ng/ml d) 11.5-31.0 ng/ml	a) Not applicable b) Not applicable c) Not applicable d) 19.5+/-5.8 ng/ml	a) Peak 0 hr after 17.5-20 ug/kg IV b) Steady-state 2 hr after 17.5-20 ug/kg IV c) Peak 1.5-2 hr after 20 ug oral d) 24 hr after 17.5-20 ug/kg IV or 20 ug oral. Patients who had undergone open-heart surgery, 6-9 yr old, 3 females, 8 males RIA
BLOOD SERUM; DELIBERATE EXPOSURE; NORWAY; CHILDREN; HEART DISEASES; CARDIOVASCULAR DISEASES; DRUG THERAPY; DRUGS; SURGERY; BIOACCUMULATION; URINE Larsen, A.; Storstein, L. 1983 Clinical Pharmacology and Therapeutics 33(6):717-726				

Digitoxin (8 CI); Card-20(22)-enolide, 3-((O-2,6-dideoxy-beta-D-ribo-hexopyranosyl-(1-4)-O-2,6-dideoxy-beta-D-ribo-hexo pyranosyl-(1-4)-2,6-dideoxy-beta-D-ribo-hexopyranosyl)oxy)-14-hydroxy-, (3beta,5beta)- (9 CI)
71-63-6
C41-H64-O13
MW 764.92, MP 256-257 C (anhydrous)

Tissue	Cases Exposure Route	Range	Mean	General Information
10334 Blood, serum	1 Injection	400-15 pmol/ml	Not applicable	0-500 hr, rapid decline to 100 pmol/ml by 24 hr, moderate decline therafter, following 1.0 mg IV. Patient with renal insufficiency RIA
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; KIDNEY DISEASES; ANTIARRHYTHMIC AGENTS; BIOACCUMULATION; DRUG THERAPY; METABOLITES; DRUGS Graves, P.E.; Fenster, P.E.; MacFarland, R.T.; Marcus, F.I.; Perrier, D. 1984 Clinical Pharmacology and Therapeutics 36(5):607-12				

Tissue	Cases Exposure Route	Range	Mean	General Information
10335 Blood, serum	6 Injection	200-4 pmol/ml	Not applicable	0-500 hr, rapid decline from 200 pmol/ml to 40 pmol/ml in 24 hrs, moderate decline therafter, following 1.0 mg IV. Healthy volunteers, 23-74 yr old RIA
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; ANTIARRHYTHMIC AGENTS; BIOACCUMULATION; DRUG THERAPY; DRUGS; METABOLITES Graves, P.E.; Fenster, P.E.; MacFarland, R.T.; Marcus, F.I.; Perrier, D. 1984 Clinical Pharmacology and Therapeutics 36(5):601-606				

Tissue	Cases Exposure Route	Range	Mean	General Information
10336 Urine	11 Injection Ingestion	6.7-15.5%	12.5%	6 d cumulative excretion, % dose. Patients who had undergone open-heart surgery, 6-9 yr old, 3 females, 8 males RIA
BLOOD SERUM; DELIBERATE EXPOSURE; NORWAY; CHILDREN; HEART DISEASES; CARDIOVASCULAR DISEASES; DRUG THERAPY; DRUGS; SURGERY; BIOACCUMULATION; URINE Larsen, A.; Storstein, L. 1983 Clinical Pharmacology and Therapeutics 33(6):717-726				

Digoxin (8 CI); Card-20(22)-enolide, 3-((O-2,6-dideoxy-beta-D-ribo-hexopyranosyl-(1-4)-O-2,6-dideoxy-beta-D-ribo-hexo pyranosyl-(1-4)-2,6-dideoxy-beta-D-ribo-hexopyranosyl)oxy)-12,14-dihydroxy-, (3beta,5beta,12beta)- (9 CI)
20830-75-5
C41-H64-O14
MW 780.92, MP about 265 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10887 Adipose	a) 4 b) 7 c) 3 d) 5 e) 3 f) 5 g) 4 Ingestion Injection	a) 1-13 ng/g b) 4-17 ng/g c) 2-7 ng/g d) 3-16 ng/g e) 5-12 ng/g f) 2-32 ng/g g) 1-10 ng/g	a) 7 ng/g b) 9 ng/g c) 5 ng/g d) 11 ng/g e) 9 ng/g f) 11 ng/g g) 5 ng/g	a) Premature infants, acute therapy b) Full-term infants, acute therapy c) Older children >2 yrs, acute therapy d) Premature infants, chronic therapy e) Full-term infants, chronic therapy f) Children <2 yrs, chronic therapy g) Children >2 yrs, chronic therapy All had received therapeutic doses. Postmortem measurements. 1 day-18 yr olds RIA
10888 Adrenal gland	a) 3 b) 5 c) 2 d) 5 e) 3 f) 4 g) 3 Ingestion Injection	a) 2-31 ng/g b) 20-75 ng/g c) 26-73 ng/g d) 28-38 ng/g e) 12-39 ng/g f) 8-82 ng/g g) 5-22 ng/g	a) 17 ng/g b) 41 ng/g c) 50 ng/g d) 32 ng/g e) 26 ng/g f) 29 ng/g g) 12 ng/g	a) Premature infants, acute therapy b) Full-term infants, acute therapy c) Older children >2 yrs, acute therapy d) Premature infants, chronic therapy e) Full-term infants, chronic therapy f) Children <2 yrs, chronic therapy g) Children >2 yrs, chronic therapy All had received therapeutic doses. Postmortem measurements. 1 day-18 yr olds RIA

BLOOD; HEART; KIDNEYS; MUSCLES; SKIN; ADIPOSE TISSUE; LIVER; SPLEEN; LUNGS; BRAIN; ADRENAL GLANDS; PANCREAS; STOMACH; GASTROINTESTINAL SYSTEM; GALL BLADDER; BLADDER; THYMUS; THYROID GLANDS; DELIBERATE EXPOSURE; PREMATURE INFANTS; INFANTS; CHILDREN; AUTOPSIES; HEART DISEASES; DRUG THERAPY; ANTIARRHYTHMIC AGENTS; FORENSIC MEDICINE; BIOACCUMULATION; DRUGS

Hastreiter, A.R.; van der Horst, R.L. 1984 Journal of Forensic Sciences 29(1):139-146

Tissue	Cases Exposure Route	Range	Mean	General Information
10889 Bile	6	1.6-47.5 ng/g	Not given	Samples taken at autopsy immediately after death "and from exhumed bodies buried from 2-5 wk." Coronary care cases RIA; HPLC; RIA

BLOOD; URINE; LIVER; HEART; KIDNEYS; BRAIN; LUNGS; VITREOUS HUMOR; BILE; AUTOPSIES; CADAVERS; CARDIOVASCULAR DISEASES; HEART DISEASES; DRUGS; DRUG THERAPY

Margot, P.A.; Finkle, B.S.; Peat, M.A. 1983 Proceedings of Western Pharmacological Society 26:393-396

Digoxin (8 CI); Card-20(22)-enolide, 3-((O-2,6-dideoxy-beta-D-ribo-hexopyranosyl-(1-4)-O-2,6-dideoxy-beta-D-ribo-hexo pyranosyl-(1-4)-2,6-dideoxy-beta-D-ribo-hexopyranosyl)oxy)-12,14-dihydroxy-, (3beta,5beta,12beta)- (9 CI)
20830-75-5
C41-H64-O14
MW 780.92, MP about 265 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10840 Bladder	a) 2 b) 3 c) 2 d) 3 e) 1 f) 3 g) 1 Ingestion Injection	a) 10-20 ng/g b) 7-28 ng/g c) 16-16 ng/g d) 11-47 ng/g e) 36 ng/g f) 5-50 ng/g g) 5 ng/g	a) 15 ng/g b) 20 ng/g c) 16 ng/g d) 25 ng/g e) 36 ng/g f) 22 ng/g g) 5 ng/g	a) Premature infants, acute therapy b) Full-term infants, acute therapy c) Older children >2 yrs, acute therapy d) Premature infants, chronic therapy e) Full-term infants, chronic therapy f) Children <2 yrs, chronic therapy g) Children >2 yrs, chronic therapy All had received therapeutic doses. Postmortem measurements. 1 day-18 yr olds RIA
10841 Blood	a) 4 b) 3 c) 7 d) 3 e) 5 f) 4 g) 3 h) 2 Ingestion Injection	a) 2.2-3.9 ng/ml b) 5.4-11.5 ng/ml c) 1.5-3.7 ng/ml d) 5.9-12.7 ng/ml e) 1.2-4.0 ng/ml f) 4.2-14.1 ng/ml g) 1.8-3.2 ng/ml h) 4.3-6.1 ng/ml	a) 2.8 ng/ml b) 8.6 ng/ml c) 2.3 ng/ml d) 8.4 ng/ml e) 2.3 ng/ml f) 9.1 ng/ml g) 2.6 ng/ml h) 5.2 ng/ml	a) Premature infants, acute therapy, antemortem b) Premature infants, acute therapy, postmortem c) Full-term, acute therapy, antemortem d) Full-term, acute therapy, postmortem e) Premature, chronic therapy, antemortem f) Premature, chronic therapy, postmortem g) Full-term, chronic therapy, antemortem h) Full-term, chronic therapy, postmortem All had received therapeutic doses. Data also for older children. Postmortem levels higher. 1 day-18 yr olds RIA

BLOOD; HEART; KIDNEYS; MUSCLES; SKIN; ADIPOSE TISSUE; LIVER; SPLEEN; LUNGS; BRAIN; ADRENAL GLANDS; PANCREAS; STOMACH; GASTROINTESTINAL SYSTEM; GALL BLADDER; BLADDER; THYMUS; THYROID GLANDS; DELIBERATE EXPOSURE; PREMATURE INFANTS; INFANTS; CHILDREN; AUTOPSIES; HEART DISEASES; DRUG THERAPY; ANTIARRHYTHMIC AGENTS; FORENSIC MEDICINE; BIOACCUMULATION; DRUGS

Hastreiter, A.R.; van der Horst, R.L. 1984 Journal of Forensic Sciences 29(1):139-146

Tissue	Cases Exposure Route	Range	Mean	General Information
10842 Blood		0.5-11.0 ng/ml	Not given	Samples taken at autopsy immediately after death. Coronary care cases RIA; HPLC; RIA

BLOOD; URINE; LIVER; HEART; KIDNEYS; BRAIN; LUNGS; VITREOUS HUMOR; BILE; AUTOPSIES; CADAVERS; CARDIOVASCULAR DISEASES; HEART DISEASES; DRUGS; DRUG THERAPY

Margot, P.A.; Finkle, B.S.; Peat, M.A. 1983 Proceedings of Western Pharmacological Society 26:393-396

Digoxin (8 CI); Card-20(22)-enolide, 3-((O-2,6-dideoxy-beta-D-ribo-hexopyranosyl-(1-4)-O-2,6-dideoxy-beta-D-ribo-hexo pyranosyl-(1-4)-2,6-dideoxy-beta-D-ribo-hexopyranosyl)oxy)-12,14-dihydroxy-, (3beta,5beta,12beta)- (9 CI)
20830-75-5
C41-H64-O14
MW 780.92, MP about 265 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10843 Blood, plasma	6 Ingestion	a) 0.25-0.2 ng/ml b) 0.50-0.2 ng/ml	a) Not applicable b) Not applicable	a) 0-24 hr, peak (2.7+/-0.183 ng/ml) at 1.25 hr. Dose 0.5 mg b) 0-24 hr, peak (2.6+/-0.342 ng/ml) at 1.06 hr. Dose 0.5 mg. Subjects also took 30 mg Diltiazem 3X/d Diltiazem increased levels at some time points. 1 female, 5 males, 22-42 yr old RIA; GC
BLOOD PLASMA; DELIBERATE EXPOSURE; JAPAN; ADULTS; HEART DISEASES; CARDIOVASCULAR DISEASES; HYPERTENSION; ANTIHYPERTENSIVE AGENTS; DRUG INTERACTION; DRUGS; BIOACCUMULATION; BIOLOGICAL MONITORING; BLOOD PRESSURE				
Yoshida, A.; Fujita, M.; Kurosawa, N.; Nioka, M.; Shichinohe, T.; Arakwa, M.; Fukuda, R.; Owada, E.; Ito, K. 1984 Clinical Pharmacology and Therapeutics 35(5):681-685				

Tissue	Cases Exposure Route	Range	Mean	General Information
10844 Blood, plasma	6 Injection	a) 21-0.2 ng/ml b) 23-0.22 ng/ml c) 25-0.25 ng/ml	a) Not given b) Not given c) Not given	a) 0 and 78 hr after 15 ug/kg bolus, IV b) 0 and 78 hr after 15 ug/kg bolus, IV and 50 mg triamterene 3x/day for 1 wk before and 4 days after digoxin c) 0 and 78 hr after 15 ug/kg bolus, IV and 100 mg spironolactone 2x/day for 1 wk before and 4 days after digoxin Estimated from graph Healthy 22-29 yr olds Spironolactone reduced renal tubular secretion of digoxin and attenuated its positive inotrophy. Triamterene reduced extra renal elimination with no changes in inotrophy. RIA
ADULTS; CARDIOVASCULAR DISEASES; BLOOD PLASMA; DRUGS; COMPARATIVE EVALUATIONS				
Waldorff, S.; Hansen, P.B.; Egeblad, H.; Berning, J.; Buch, J.; Kjaergard, H.; Steiness, E. 1983 Clinical Pharmacology and Therapeutics 33(4):418-423				

Tissue	Cases Exposure Route	Range	Mean	General Information
10845 Blood, plasma	8 Injection	a) 0.56-0.69 ng/ml b) 0.49-0.91 ng/ml c) 0.68-1.04 ng/ml d) 0.91-0.78 ng/ml e) 0.46-0.93 ng/ml f) 0.39-0.94 ng/ml	a) 0.72+/-0.14 ng/ml b) 0.64+/-0.13 ng/ml c) Not applicable d) Not applicable e) 0.62+/-0.15 ng/ml f) 0.62+/-0.17 ng/ml	a) Steady-state, beginning of 2 hr normal physical activity b) Steady-state, end of 2 hr normal physical activity c) 15-120 min in supine position immediately following 2 hr normal physical activity d) 15-60 min during normal physical activity following 2 hr in supine position e) Immediately after 150-200 kw for 15 min exercise test f) 10 min after end of exercise test Initial dose 1 mg, maintenance dose 0.1875 mg b.i.d. for 14 d. Study began 8 hr after morning dose. Healthy volunteers RIA
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; DENMARK; ADULTS; HEART DISEASES; CARDIOVASCULAR DISEASES; ANALGESICS; DRUGS; DRUG THERAPY; BIOACCUMULATION				
Pedersen, K.E.; Madsen, J.; Kjaer, K.; Klitgaard, N.A.; Hvidt, S. 1983 Clinical Pharmacology and Therapeutics 34(3):303-308				

Digoxin (8 CI); Card-20(22)-enolide, 3-((O-2,6-dideoxy-beta-D-ribo-hexopyranosyl-(1-4)-O-2,6-dideoxy-beta-D-ribo-hexo pyranosyl-(1-4)-2,6-dideoxy-beta-D-ribo-hexopyranosyl)oxy)-12,14-dihydroxy-, (3beta,5beta,12beta)- (9 CI)
20830-75-5
C41-H64-O14
MW 780.92, MP about 265 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10846 Blood, plasma	6 Ingestion	a) 0.6-0.8 ng/ml b) 0.8-0.4 ng/ml	a) Not applicable b) Not applicable	a) 0-48 hr, peak (1.5 ng/ml) 1.5 hr after 0.2 mg beta-acetyl form b) 0-48 hr, peak (1.8 ng/ml) 2 hr after 0.2 mg beta-acetyl form and 90 mg diltiazem Presence of diltiazem increases steady-state over 48 hr by 22%. Healthy volunteers, mean age 24.5+/-2.6 yr, wt 71.7+/-9.5 kg, ht 179.1+/-8.5 cm. RIA
BLOOD PLASMA; DELIBERATE EXPOSURE; AUSTRIA; ADULTS; HEART DISEASES; HYPERTENSION; CARDIOVASCULAR DISEASES; ANTIARRHYTHMIC AGENTS; BETA BLOCKER; DRUG INTERACTION; DRUG THERAPY; DRUGS; BIOACCUMULATION Rameis, H.; Magometschnigg, D.; Ganzinger, U. 1984 Clinical Pharmacology and Therapeutics 36(2):183-189				

Tissue	Cases Exposure Route	Range	Mean	General Information
10847 Blood, serum	16 Ingestion	a) 0.5-2 ng/ml b) 0.7-1.8 ng/ml c) 0.5-3.8 ng/ml d) 0.5-3.5 ng/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) Tablets, with metoclopramide, 6 and 1 hr b) Tablets, 6 and 1.5 hr c) Capsules, with metoclopramide, 6 and 0.75 hr d) Capsules, 6 and 0.75 hr Ranges of means Healthy adults 18-34 yr, 135-198 lb RIA
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; DRUGS; DRUG THERAPY; DRUG INTERACTION; COMPARATIVE EVALUATIONS; BIOAVAILABILITY Johnson, B.F.; Bustrack, J.A.; Urbach, D.R.; Hull, J.H.; Marwaha, R. 1984 Clinical Pharmacology and Therapeutics 36(6):724-730				

Tissue	Cases Exposure Route	Range	Mean	General Information
10848 Blood, serum	9	a) 0.65-4.0 nmol/l b) 0.30-3.05 nmol/l c) 0.75-3.60 nmol/l	a) Not given b) Not given c) Not given	a) Radioimmunoassay b) Fluorescence polarisation immunoassay c) FPIA, samples diluted 2X with saline (9 g NaCl/L) Protein interference in b). Immunoassay
DELIBERATE EXPOSURE; MEASUREMENT METHODS; COMPARATIVE EVALUATIONS; BLOOD SERUM; DRUGS; ANTIARRHYTHMIC AGENTS Huang, Y.S.; Jenkins, K.; Manku, M.S.; Davignon, J. 1984 Clinical Chemistry 30(2):337-338				

Digoxin (8 CI); Card-20(22)-enolide, 3-((O-2,6-dideoxy-beta-D-ribo-hexopyranosyl-(1-4)-O-2,6-dideoxy-beta-D-ribo-hexo pyranosyl-(1-4)-2,6-dideoxy-beta-D-ribo-hexopyranosyl)oxy)-12,14-dihydroxy-, (3beta,5beta,12beta)- (9 CI)
20830-75-5
C41-H64-O14
MW 780.92, MP about 265 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10349 Blood, serum	18	0.24-1.48 ng/ml	Not given	Steady state. Patients being treated for arrhythmia or congestive heart disease. Maturity or age not significant factor in level. 5-20 yr olds, 7 males, 11 females EMIT
BLOOD SERUM; DRUGS; DRUG THERAPY; ANTIARRHYTHMIC AGENTS; CARDIOVASCULAR DISEASES; HEART DISEASES; DELIBERATE EXPOSURE; STIMULANTS; CHILDREN; ADOLESCENTS; AGE Linday, L.A.; Drayer, D.E.; Khan, M.A.A.; Cicalese, C.; Reidenberg, M.M. 1984 Clinical Pharmacology and Therapeutics 35(4):438-446				

Tissue	Cases Exposure Route	Range	Mean	General Information
10550 Blood, serum	23 Ingestion	a) Not given, b) Not given c) Not given	a) 0.4+/-0.06 ng/ml b) 0.8+/-0.10 ng/ml c) 0.5+/-0.08 ng/ml	a) 24 hr after 0.25 mg, measured for 10 d b) 24 hr after 0.25 mg and 200 mg quinidine 4X/d, measured for 4 d c) 24 hr after 0.25 mg, following discontinuance of quinidine, 10 subjects only. Healthy volunteers, 15 males, 8 females, 21-46 yr old. No clinical evidence of heart disease, ECG normal RIA
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; ANTIARRHYTHMIC AGENTS; DRUG INTERACTION; DRUG THERAPY; BIOACCUMULATION; BIOAVAILABILITY; DRUGS Das, G.; Barr, C.E.; Carlson, J. 1984 Clinical Pharmacology and Therapeutics 35(3):317-321				

Tissue	Cases Exposure Route	Range	Mean	General Information
10351 Blood, serum	6 Injection	a) 0.52+/-0.06-0.73+/-0.02 ng/ml b) 2.81+/-0.14-3.95+/-0.66 ng/ml	a) 0.63+/-0.08 ng/ml b) 3.25+/-0.44 ng/ml	a) 0.01 ug/kg/min infusion b) 0.05 ug/kg/min infusion Average of 3 samples, drawn at 70, 90, and 110 min after start of infusion. Clearance highly correlated to renal plasma flow. Healthy adults, 30.3+/-5.8 yr, 76.0+/-10.1 kg, normal renal function RIA
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; DRUGS Gibson, T.P.; Ribner, H.S.; Quintanilla, A.P. 1984 Clinical Pharmacology and Therapeutics 36(4):478-484				

Digoxin (8 CI); Card-20(22)-enolide, 3-((O-2,6-dideoxy-beta-D-ribo-hexopyranosyl-(1-4)-O-2,6-dideoxy-beta-D-ribo-hexo pyranosyl-(1-4)-2,6-dideoxy-beta-D-ribo-hexopyranosyl)oxy)-12,14-dihydroxy-, (3beta,5beta,12beta)- (9 CI)
20830-75-5
C41-H64-O14
MW 780.92, MP about 265 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10352 Blood, serum	8 Injection Ingestion	a) 1.5-0.35 ng/ml b) 1.4-0.37 ng/ml	a) Not given b) Not given	a) On d 16, 2 and 24 hr after 0.25 mg IV on d 5, and orally d 9-16 b) Same as a), with concurrent administration 250 mg/d methyldopa d 1-16 Ranges of means. Mean steady-state levels 0.62+/-0.3 ng/ml in a), and 0.65+/-0.2 ng/ml in b). No apparent effect of methyldopa on digoxin disposition. Values estimated from figure. Healthy 21-40 yr old volunteers RIA
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ANTIHYPERTENSIVE AGENTS; DRUG INTERACTION; DRUGS				
May, C.A.; Vlasses, P.H.; Rocci, M.L., Jr.; Rotmensch, H.H.; Swanson, B.N.; Tannenbaum, R.P.; Ferguson, R.K.; Abrams, W.B. 1984 Journal of Clinical Pharmacology 24:386-389				

Tissue	Cases Exposure Route	Range	Mean	General Information
10353 Blood, serum	16 Ingestion	a) 0.2-0.2 ng/ml b) 0.2-0.3 ng/ml c) 0.3-0.3 ng/ml d) 0.4-0.3 ng/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 0.25-12 hrs, peak (1.5 ng/ml) at 1 hr after two 0.25 mg tablets and 240 mL water b) 0.25-12 hrs, peak (1.5 ng/ml) at 1.5 hr after two 0.25 mg tablets and 30 mL water c) 0.25-12 hrs, peak (3.0 ng/ml) at 1 hr after two 0.3 mg capsules of digoxin solution and 30 mL water d) 0.25-12 hrs, peak (3.5 ng/ml) at 1 hr after two 0.2 mg capsules of digoxin solution and 240 mL water. Healthy volunteers RIA
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; CARDIOVASCULAR DISEASES; DRUG THERAPY; DRUGS; ANTIARRHYTHMIC AGENTS; BIOACCUMULATION				
Bustrack, J.A.; Katz, J.D.; Hull, J.H.; Postrer, J.R.; Hammond, J.E.; Christenson, R.H. 1984 Journal of Pharmaceutical Sciences 73(10):1397-1400				

Tissue	Cases Exposure Route	Range	Mean	General Information
10354 Blood, serum	2 Ingestion	a) 0.8-1.25 ng/ml b) 0.15-0.5 ng/ml c) 0.5-1.1 ng/ml d) 1.2-2.3 ng/ml e) Not given f) Not given g) Not given	a) Not given b) Not given c) Not given d) Not given e) 1.7 ng/ml f) 1.6 ng/ml g) 2.0 ng/ml	a) 12/81-3/6/82, 0.06 mg/day b) 3/6-25, 0.06 mg/day, with 300 mg/day rifampin c) 3/26-10/1, 0.15 mg/day, with 300 mg/day rifampin d) 10/6-16, 0.15 mg/day, rifampin discontinued e) Alternating 0.125 and 0.25 mg/day dose f) 0.25 mg/day dose, with 600 mg/day rifampin g) 0.125 mg/day dose, rifampin discontinued a-d) one patient, e)-g) one patient Rifampin therapy strongly affects digoxin levels, dose must be adjusted. Patients with renal disease, dependent on dialysis, 47 and 60 yr, 52 and 68 kg RIA; HPLC
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ADULTS; CASE HISTORIES; DRUGS; DRUG INTERACTION; METABOLISM				
Gault, H.; Longerich, L; Dawe, M.; Fine, A. 1984 Clinical Pharmacology and Therapeutics 35(6):750-754				

Digoxin (8 CI); Card-20(22)-enolide, 3-((O-2,6-dideoxy-beta-D-ribo-hexopyranosyl-(1-4)-O-2,6-dideoxy-beta-D-ribo-hexo pyranosyl-(1-4)-2,6-dideoxy-beta-D-ribo-hexopyranosyl)oxy)-12,14-dihydroxy-, (3beta,5beta,12beta)- (9 CI)
20830-75-5
C41-H64-O14
MW 780.92, MP about 265 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10555 Blood, serum	a) 16 b) 19 c) 13 d) 19 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 3.16+/-0.25 ug/l b) 1.24+/-0.15 ug/l c) 2.36+/-0.37 ug/l d) 2.07+/-0.07 ug/l	a) Gastrointestinal symptoms, doses 0.23 +or- 0.02 mg/day b) Automaticity symptoms, doses 0.13 +or- 0.01 mg/day c) Cardiotoxicity symptoms, doses 0.25 +or- 0.02 mg/day d) No symptoms, doses 0.24 +or- 0.02 mg/day Automaticity group significantly different. Patients with digoxin toxicity, controls Abnormal Ca:K ratio and arterial pH in automaticity group RIA
DRUGS; BLOOD SERUM; DRUG THERAPY; ANTIARRHYTHMIC AGENTS; CARDIOVASCULAR DISEASES Sonnenblick, M.; Abraham, A.S.; Meshulam, Z.; Eylath, U. 1985 British Medical Journal 286:1089-1091				

Tissue	Cases Exposure Route	Range	Mean	General Information
10556 Blood, serum	9 Ingestion	a) 0.45-1.9 mg/ml b) 1.4-5.6 mg/ml	a) Not given b) Not given	a) During regular treatment with 0.03-0.5 mg/d b) With additional 200-800 mg/d amiodarone Digoxin dose reduced for some subjects in b). 28-44% decrease in renal clearance in b). Drug interaction more acute in children than in adults. 6 mo-16 yr olds with cardiac disorders RIA
BLOOD SERUM; DELIBERATE EXPOSURE; AGE; HEART DISEASES; CARDIOVASCULAR DISEASES; ANTIARRHYTHMIC AGENTS; DRUGS; DRUG INTERACTION; METABOLISM Koren, G.; Hesselein, P.S.; MacLeod, S.M. 1984 Journal of Pediatrics 104(3):467-470				

Tissue	Cases Exposure Route	Range	Mean	General Information
10557 Blood, serum	1 Injection Ingestion	a) 1.9-0.16 ng/ml b) 2.0-0.2 ng/ml c) 3.1-0.4 ng/ml d) 3.0-0.75 ng/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) Digoxin, 4 and 80 hr, peak 40 ng/ml at 5 min b) Digoxin + spironolactone 4 and 96 hr, peak 80 ng/ml at 5 min c) Digoxin + quinidine, 4 and 120 hr, peak 75 mg/ml at 5 min d) Digoxin + quinidine + spironolactone, 4 and 120 hr, peak 30 ug/ml at 5 min Drug regimens: Digoxin, 1 mg IV. Quinidine, 200 mg oral dose every 6 hr for 3 d before and 5 d after digoxin. Spironolactone, 50 mg oral dose in same regimen as quinidine. Measured after 4 separate treatments each at least 3 wk apart. Healthy subjects, taking no medications RIA
BLOOD SERUM; DELIBERATE EXPOSURE; HEART DISEASES; ANTIARRHYTHMIC AGENTS; DRUG INTERACTION; BIOLOGICAL MONITORING; DRUGS; DRUG THERAPY Fenster, P.E.; Hager, W.D.; Goodman, M.M. 1984 Clinical Pharmacology and Therapeutics 36(1):70-73				

Digoxin (8 CI); Card-20(22)-enolide, 3-((O-2,6-dideoxy-beta-D-ribo-hexopyranosyl-(1-4)-O-2,6-dideoxy-beta-D-ribo-hexo pyranosyl-(1-4)-2,6-dideoxy-beta-D-ribo-hexopyranosyl)oxy)-12,14-dihydroxy-, (3beta,5beta,12beta)- (9 CI)
20830-75-5
C41-H64-O14
MW 780.92, MP about 265 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10856 Blood, serum	20 Ingestion Injection	a) 0-2 ng/ml b) 1.56-2.02 ng/ml	a) Not applicable b) 1.77 ng/ml	a) Day 7-21 of menstrual cycle, steady state (2 ng/ml) d 11-21 after 0.5 mg/d IV, estimated from graph b) Day 20-22 of menstrual cycle, after 0.5 mg/d oral from d 10-22 Studied serum thyroid stimulating hormone and serum prolactin in response to digoxin. No hormonal changes associated with treatment. Healthy volunteers, 19-30 yr old, mean wt 57 kg. RIA

URINE; BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; GERMANY; DRUG THERAPY; DRUG INTERACTION; DRUGS; HORMONES; BIOACCUMULATION; MENSTRUATION
Bellman, O.; Ochs, H.R.; Knuchel, M.; Greenblatt, D.J. 1984 Journal of Clinical Pharmacology 24:474-479

Tissue	Cases Exposure Route	Range	Mean	General Information
10859 Blood, serum	11 Injection	a) Not given b) Not given c) Not given d) 2.6-4.9 ng/ml	a) 3.1+/-0.6 ng/ml b) 2.8+/-0.6 ng/ml c) 2.3+/-0.5 ng/ml d) 4.1+/-1.1 ng/ml	a) 6 hr after 20 mcg/kg IV b) 12 hr c) 24 hr d) Steady-state with maintenance dose 10 mcg/kg/24 hr. 0.93-2.71 (mean 1.51+/-0.47) kg, 1-7 d olds (gestational age 26-36 mean 31.6+/-3.5 wk) with patent ductus arteriosus RIA

BLOOD SERUM; DELIBERATE EXPOSURE; PREMATURE INFANTS; NEWBORN; HEART DISEASES; DRUGS; DRUG THERAPY
Ng, P.K.; Collins-Nakai, R.L. 1983 Research Communications in Chemical Pathology and Pharmacology 42(1):71-79

Tissue	Cases Exposure Route	Range	Mean	General Information
10860 Blood, serum	1 Ingestion	a) Not given b) Not given	a) >5 ug/l b) 1.4 ug/l	a) 18 hr after ingesting, 100 0.25 mg tablets b) Day 5, therapeutic range Effectively treated with continuous amiodarone infusion for 36 hr after admission. Discharged on 8th day. Initial sample a), based on half life, was later estimated to be >40 ug/l. 26 yr old patient Unsteadiness, blurred vision, sinus bradycardia of 50 beats/min. Recurring intractable ventricular fibrillation unresponsive to Class I antiarrhythmic drugs

BLOOD SERUM; DELIBERATE EXPOSURE; CASE HISTORIES; ANTIARRHYTHMIC AGENTS; DRUG ABUSE; DRUGS; DRUG THERAPY; LAVAGE
Maheswaran, R.; Bramble, M.G.; Hardisty, C.A. 1985 British Medical Journal 287:392-395

Digoxin (8 CI); Card-20(22)-enolide, 3-((O-2,6-dideoxy-beta-D-ribo-hexopyranosyl-(1-4)-O-2,6-dideoxy-beta-D-ribo-hexo pyranosyl-(1-4)-2,6-dideoxy-beta-D-ribo-hexopyranosyl)oxy)-12,14-dihydroxy-, (3beta,5beta,12beta)- (9 CI)
20830-75-5
C41-H64-O14
MW 780.93, MP about 265 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10861 Blood, serum	14 Injection Ingestion	a) Not given b) Not given c) Not given d) 18-1.5 ng/ml e) 18-0.5 ng/ml	a) 0.6+/-0.2 ng/ml b) 0.6+/-0.2 ng/ml c) 0.8+/-0.2 ng/ml d) Not applicable e) Not applicable	a) After 0.375 mg/d IV for 7 d, 9 cases b) After 0.375 mg/d IV for 14 d and 300 mg/d oral disopyramide for 7 d, 9 cases c) After 0.375 mg/d IV for 21 d, 300 mg/d oral disopyramide from day 8-14, and 600 mg/d oral disopyramide from day 15-21, 9 cases d) 0-12 hr, peak (18 ng/ml) after 0.8 mg IV, one subject e) 0-12 hr, peak (18 ng/ml) after 0.8 mg IV and 600 mg/day oral disopyramide, one case. Healthy volunteers, mean age 25 yr RIA
BLOOD SERUM; DELIBERATE EXPOSURE; GERMANY; ADULTS; CARDIOVASCULAR DISEASES; HEART DISEASES; ANTIARRHYTHMIC AGENTS; DRUG INTERACTION; DRUGS; DRUG THERAPY; BIOACCUMULATION Rieier, T.; Burk, M.; Petere, U.; Grabensee, B.; Seipel, L. 1983 Clinical Pharmacology and Therapeutics 34(2):176-180				

Tissue	Cases Exposure Route	Range	Mean	General Information
10862 Blood, serum	a) 4 b) 6 c) 9 d) 4 Ingestion	a) 1.18+/-0.16-1.42+/-0.02 ng/ml b) 0.67+/-0.15-1.12+/-0.14 ng/ml c) 0.84+/-0.21-0.90+/-0.22 ng/ml d) 0.34+/-0.04-0.34+/-0.04 ng/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) Patients with cardiac insufficiency, 13-18 hr, peak (1.58+/-0.23 ng/ml) 14 hr after 0.25 mg b) Patients without cardiac insufficiency, 13-18 hr, peak (1.28+/-0.14 ng/ml) 14 hr after 0.25 mg c) Patients with cardiac insufficiency, quinidine treatment, 13-18 hr, peak (0.90+/-.22 ng/ml) 18 hr after 0.25 mg d) Patients without cardiac insufficiency, quinidine treatment, 13-18 hr, peak (0.52+/-0.15 ng/ml) 14 hr after 0.25 mg. 20-80 yr old healthy volunteers and patients EMIT
BLOOD SERUM; DELIBERATE EXPOSURE; ITALY; ADULTS; CARDIOVASCULAR DISEASES; HEART DISEASES; ANTIARRHYTHMIC AGENTS; DRUGS; DRUG THERAPY; BIOACCUMULATION Iacono, A.; Aiello, C.; Gualtieri, S.; Iarussi, D.; Matera, M.G.; De Carlo, R.; De Marco, G.; Imperatore, A.; Marmo, E. 1983 Current Therapeutic Research 33(3):579-586				

Tissue	Cases Exposure Route	Range	Mean	General Information
10863 Blood, serum	12 Ingestion	0.97+/-0.24-1.12+/-0.21 ng/ml	Not given	Day 1 and 10 of coadministration of 0.25 mg tablet 2x/d, with 200 mg 3x/d tiaprofenic acid (Surgam). Digoxin alone given during 6 days preceding and 4 days following. Ranges of means. Healthy volunteers, mean age 32+/-9.8, wt 59.1+/-7.8 kg, ht 165.3+/-6.8 cm Gastrointestinal upset in one subject ELISA
BLOOD SERUM; DELIBERATE EXPOSURE; ANTIINFLAMMATORY AGENTS; DRUG INTERACTION; DRUGS Doering, V.W.; Iebary, J. 1983 Arzneimittel-Forschung/Drug Research 33(1)1:167-168				

Digoxin (8 CI); Card-20(22)-enolide, 3-((O-2,6-dideoxy-beta-D-ribo-hexopyranosyl-(1-4)-O-2,6-dideoxy-beta-D-ribo-hexo pyranosyl-(1-4)-2,6-dideoxy-beta-D-ribo-hexopyranosyl)oxy)-12,14-dihydroxy-, (3beta,5beta,12beta)- (9 CI)
20830-75-5
C41-H64-O14
MW 780.93, MP about 265 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10364 Brain	a) 2 b) 5 c) 3 d) 6 e) 2 f) 8 g) 2 Ingestion Injection	a) 2-5 ng/g b) 1-15 ng/g c) 1-10 ng/g d) 3-10 ng/g e) 5-34 ng/g f) 8-57 ng/g g) 3-30 ng/g	a) 3 ng/g b) 6 ng/g c) 6 ng/g d) 7 ng/g e) 19 ng/g f) 32 ng/g g) 16 ng/g	a) Premature infants, acute therapy b) Full-term infants, acute therapy c) Older children >2 yrs, acute therapy d) Premature infants, chronic therapy e) Full-term infants, chronic therapy f) Children <2 yrs, chronic therapy g) Children >2 yrs, chronic therapy All had received therapeutic doses. Postmortem measurements. 1 day-18 yr olds RIA
BLOOD; HEART; KIDNEYS; MUSCLES; SKIN; ADIPOSE TISSUE; LIVER; SPLEEN; LUNGS; BRAIN; ADRENAL GLANDS; PANCREAS; STOMACH; GASTROINTESTINAL SYSTEM; GALL BLADDER; BLADDER; THYMUS; THYROID GLANDS; DELIBERATE EXPOSURE; PREMATURE INFANTS; INFANTS; CHILDREN; AUTOPSIES; HEART DISEASES; DRUG THERAPY; ANTIARRHYTHMIC AGENTS; FORENSIC MEDICINE; BIOACCUMULATION; DRUGS Hactreiter, A.R.; van der Horst, R.L. 1984 Journal of Forensic Sciences 29(1):139-146				

Tissue	Cases Exposure Route	Range	Mean	General Information
10365 Brain	7	0.5-8.5 ng/g	Not given	Samples taken at autopsy immediately after death "and from exhumed bodies buried from 2-5 wk." Coronary care cases RIA; HPLC; RIA
BLOOD; URINE; LIVER; HEART; KIDNEYS; BRAIN; LUNGS; VITREOUS HUMOR; BILE; AUTOPSIES; CADAVERS; CARDIOVASCULAR DISEASES; HEART DISEASES; DRUGS; DRUG THERAPY Marget, P.A.; Finkle, B.S.; Peat, M.A. 1963 Proceedings of Western Pharmacological Society 26:393-396				

Tissue	Cases Exposure Route	Range	Mean	General Information
10366 Gall bladder	a) 3 b) 6 c) 2 d) 5 e) 3 f) 3 g) 4 Ingestion Injection	a) 19-29 ng/g b) 47-160 ng/g c) 254-320 ng/g d) 1-267 ng/g e) 31-144 ng/g f) 45-299 ng/g g) 2-46 ng/g	a) 25 ng/g b) 81 ng/g c) 287 ng/g d) 101 ng/g e) 85 ng/g f) 175 ng/g g) 16 ng/g	a) Premature infants, acute therapy b) Full-term infants, acute therapy c) Older children >2 yrs, acute therapy d) Premature infants, chronic therapy e) Full-term infants, chronic therapy f) Children <2 yrs, chronic therapy g) Children >2 yrs, chronic therapy All had received therapeutic doses. Postmortem measurements. 1 day-18 yr olds RIA

(next page)

Digoxin (8 CI); Card-20(22)-enolide, 3-((O-2,6-dideoxy-beta-D-ribo-hexopyranosyl-(1-4)-O-2,6-dideoxy-beta-D-ribo-hexo pyranosyl-(1-4)-2,6-dideoxy-beta-D-ribo-hexopyranosyl)oxy)-12,14-dihydroxy-, (3beta,5beta,12beta)- (9 CI)
20830-75-5
C41-H64-O14
MW 780.92, MP about 265 C (decomp)

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
10867 Gonads	a) 2 b) 6 c) 2 d) 3 e) 2 f) 3 g) 1 Ingestion Injection	a) 8-17 ng/g b) 4-54 ng/g c) 17-19 ng/g d) 4-28 ng/g e) 14-62 ng/g f) 4-50 ng/g g) 3 ng/g	a) 13 ng/g b) 22 ng/g c) 18 ng/g d) 16 ng/g e) 38 ng/g f) 24 ng/g g) 3 ng/g	a) Premature infants, acute therapy b) Full-term infants, acute therapy c) Older children >2 yrs, acute therapy d) Premature infants, chronic therapy e) Full-term infants, chronic therapy f) Children <2 yrs, chronic therapy g) Children >2 yrs, chronic therapy All had received therapeutic doses. Postmortem measurements. 1 day-18 yr olds RIA
10868 Heart	a) 8 b) 2 c) 8 d) 7 e) 8 f) 4 g) 2 h) 2 Ingestion Injection	a) 206-606 ng/g b) 143-394 ng/g c) 226-806 ng/g d) 81-444 ng/g e) 251-887 ng/g f) 220-476 ng/g g) 384-661 ng/g h) 388-401 ng/g	a) 344 ng/g b) 269 ng/g c) 476 ng/g d) 259 ng/g e) 450 ng/g f) 319 ng/g g) 532 ng/g h) 394 ng/g	a) Premature, acute therapy, ventricles b) Premature, acute therapy, atria c) Full-term, acute therapy, ventricles d) Full-time, acute therapy, atria e) Premature, chronic therapy, ventricles f) Premature, chronic therapy, atria g) Full-term, chronic therapy, ventricles h) Full-term, chronic therapy, atria All had received therapeutic doses. Postmortem measurements. Data also for older children. Ventricular levels higher. 1 day-18 yr olds RIA

BLOOD; HEART; KIDNEYS; MUSCLES; SKIN; ADIPOSE TISSUE; LIVER; SPLEEN; LUNGS; BRAIN; ADRENAL GLANDS; PANCREAS; STOMACH; GASTROINTESTINAL SYSTEM; GALL BLADDER; BLADDER; THYMUS; THYROID GLANDS; DELIBERATE EXPOSURE; PREMATURE INFANTS; INFANTS; CHILDREN; AUTOPSIES; HEART DISEASES; DRUG THERAPY; ANTIARRHYTHMIC AGENTS; FORENSIC MEDICINE; BIOACCUMULATION; DRUGS

Hastreiter, A.R.; van der Horst, R.L. 1964 Journal of Forensic Sciences 20(1):139-146

Tissue	Cases Exposure Route	Range	Mean	General Information
10869 Heart	8	4.6-340 ng/g	Not given	Samples taken at autopsy immediately after death "and from exhumed bodies buried from 2-5 wk." Coronary care cases RIA; HPLC; RIA

BLOOD; URINE; LIVER; HEART; KIDNEYS; BRAIN; LUNGS; VITREOUS HUMOR; BILE; AUTOPSIES; CADAVERS; CARDIOVASCULAR DISEASES; HEART DISEASES; DRUGS; DRUG THERAPY

Margot, P.A.; Finkle, B.S.; Peat, M.A. 1983 Proceedings of Western Pharmacological Society 26:393-396

Digoxin (8 CI); Card-20(22)-enolide, 3-((O-2,6-dideoxy-beta-D-ribo-hexopyranosyl-(1-4)-O-2,6-dideoxy-beta-D-ribo-hexo pyranosyl-(1-4)-2,6-dideoxy-beta-D-ribo-hexopyranosyl)oxy)-12,14-dihydroxy-, (3beta,5beta,12beta)- (9 CI)
20830-75-5
C41-H64-O14
MW 780.92, MP about 265 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10870 Intestine	a) 4 b) 7 c) 3 d) 7 e) 3 f) 4 g) 4 Ingestion Injection	a) 23-169 ng/g b) 28-1519 ng/g c) 53-84 ng/g d) 103-390 ng/g e) 46-297 ng/g f) 30-563 ng/g g) 20-256 ng/g	a) 64 ng/g b) 358 ng/g c) 70 ng/g d) 183 ng/g e) 175 ng/g f) 177 ng/g g) 98 ng/g	a) Premature infants, acute therapy b) Full-term infants, acute therapy c) Older children >2 yrs, acute therapy d) Premature infants, chronic therapy e) Full-term infants, chronic therapy f) Children <2 yrs, chronic therapy g) Children >2 yrs, chronic therapy All had received therapeutic doses. Postmortem measurements. 1 day-18 yr olds RIA
10871 Kidney	a) 4 b) 7 c) 3 d) 8 f) 3 g) 4 h) 4 Ingestion Injection	a) 24-144 ng/g b) 120-277 ng/g c) 17-211 ng/g d) 30-416 ng/g e) 106-242 ng/g f) 51-884 ng/g g) 30-251 ng/g	a) 73 ng/g b) 180 ng/g c) 122 ng/g d) 115 ng/g e) 171 ng/g f) 291 ng/g g) 131 ng/g	a) Premature infants, acute therapy b) Full-term infants, acute therapy c) Older children >2 yrs, acute therapy d) Premature infants, chronic therapy e) Full-term infants, chronic therapy f) Children <2 yrs, chronic therapy g) Children >2 yrs, chronic therapy All had received therapeutic doses. Postmortem measurements. 1 day-18 yr olds RIA

BLOOD; HEART; KIDNEYS; MUSCLES; SKIN; ADIPOSE TISSUE; LIVER; SPLEEN; LUNGS; BRAIN; ADRENAL GLANDS; PANCREAS; STOMACH; GASTROINTESTINAL SYSTEM; GALL BLADDER; BLADDER; THYMUS; THYROID GLANDS; DELIBERATE EXPOSURE; PREMATURE INFANTS; INFANTS; CHILDREN; AUTOPSIES; HEART DISEASES; DRUG THERAPY; ANTIARRHYTHMIC AGENTS; FORENSIC MEDICINE; BIOACCUMULATION; DRUGS

Hastreiter, A.R.; van der Horst, R.L. 1984 Journal of Forensic Sciences 29(1):139-146

Tissue	Cases Exposure Route	Range	Mean	General Information
10872 Kidney	7	13.3-87.5 ng/g	Not given	Samples taken at autopsy immediately after death "and from exhumed bodies buried from 2-5 wk." Coronary care cases RIA; HPLC; RIA

BLOOD; URINE; LIVER; HEART; KIDNEYS; BRAIN; LUNGS; VITREOUS HUMOR; BILE; AUTOPSIES; CADAVERS; CARDIOVASCULAR DISEASES; HEART DISEASES; DRUGS; DRUG THERAPY

Margot, P.A.; Finkle, B.S.; Peat, M.A. 1983 Proceedings of Western Pharmacological Society 26:393-396

Digoxin (8 CI); Card-20(22)-enolide, 3-((O-2,6-dideoxy-beta-D-ribo-hexopyranosyl-(1-4)-O-2,6-dideoxy-beta-D-ribo-hexo pyranosyl-(1-4)-2,6-dideoxy-beta-D-ribo-hexopyranosyl)oxy)-12,14-dihydroxy-, (3beta,5beta,12beta)- (9 CI)
20830-75-5
C41-H64-O14
MW 780.92, MP about 265 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10873 Liver	a) 4 b) 7 c) 3 d) 8 e) 3 f) 4 g) 4 Ingestion Injection	a) 6-106 ng/g b) 11-88 ng/g c) 27-47 ng/g d) 31-147 ng/g e) 56-163 ng/g f) 32-189 ng/g g) 21-77 ng/g	a) 37 ng/g b) 52 ng/g c) 37 ng/g d) 86 ng/g e) 103 ng/g f) 75 ng/g g) 42 ng/g	a) Premature infants, acute therapy b) Full-term infants, acute therapy c) Older children >2 yrs, acute therapy d) Premature infants, chronic therapy e) Full-term infants, chronic therapy f) Children <2 yrs, chronic therapy g) Children >2 yrs, chronic therapy All had received therapeutic doses. Postmortem measurements. 1 day-18 yr olds RIA
BLOOD; HEART; KIDNEYS; MUSCLES; SKIN; ADIPOSE TISSUE; LIVER; SPLEEN; LUNGS; BRAIN; ADRENAL GLANDS; PANCREAS; STOMACH; GASTROINTESTINAL SYSTEM; GALL BLADDER; BLADDER; THYMUS; THYROID GLANDS; DELIBERATE EXPOSURE; PREMATURE INFANTS; INFANTS; CHILDREN; AUTOPSIES; HEART DISEASES; DRUG THERAPY; ANTIARRHYTHMIC AGENTS; FORENSIC MEDICINE; BIOACCUMULATION; DRUGS Hastreiter, A.R.; van der Horst, R.L. 1984 Journal of Forensic Sciences 29(1):139-146				

Tissue	Cases Exposure Route	Range	Mean	General Information
10874 Liver	8	1.2-33 ng/g	Not given	Samples taken at autopsy immediately after death "and from exhumed bodies buried from 2-5 wk." Coronary care cases RIA; HPLC; RIA
BLOOD; URINE; LIVER; HEART; KIDNEYS; BRAIN; LUNGS; VITREOUS HUMOR; BILE; AUTOPSIES; CADAVERS; CARDIOVASCULAR DISEASES; HEART DISEASES; DRUGS; DRUG THERAPY Margot, P.A.; Finkle, B.S.; Peat, M.A. 1985 Proceedings of Western Pharmacological Society 28:393-396				

Tissue	Cases Exposure Route	Range	Mean	General Information
10875 Lung	a) 3 b) 7 c) 3 d) 6 e) 2 f) 5 g) 4 Ingestion Injection	a) 18-32 ng/g b) 16-70 ng/g c) 12-44 ng/g d) 21-47 ng/g e) 16-44 ng/g f) 7-94 ng/g g) 2-20 ng/g	a) 25 ng/g b) 38 ng/g c) 28 ng/g d) 32 ng/g e) 30 ng/g f) 38 ng/g g) 11 ng/g	a) Premature infants, acute therapy b) Full-term infants, acute therapy c) Older children >2 yrs, acute therapy d) Premature infants, chronic therapy e) Full-term infants, chronic therapy f) Children <2 yrs, chronic therapy g) Children >2 yrs, chronic therapy All had received therapeutic doses. Postmortem measurements. 1 day-18 yr olds RIA
BLOOD; HEART; KIDNEYS; MUSCLES; SKIN; ADIPOSE TISSUE; LIVER; SPLEEN; LUNGS; BRAIN; ADRENAL GLANDS; PANCREAS; STOMACH; GASTROINTESTINAL SYSTEM; GALL BLADDER; BLADDER; THYMUS; THYROID GLANDS; DELIBERATE EXPOSURE; PREMATURE INFANTS; INFANTS; CHILDREN; AUTOPSIES; HEART DISEASES; DRUG THERAPY; ANTIARRHYTHMIC AGENTS; FORENSIC MEDICINE; BIOACCUMULATION; DRUGS Hastreiter, A.R.; van der Horst, R.L. 1984 Journal of Forensic Sciences 29(1):139-146				

Digoxin (8 CI); Card-20(22)-enolide, 3-((O-2,6-dideoxy-beta-D-ribo-hexopyranosyl-(1-4)-O-2,6-dideoxy-beta-D-ribo-hexo pyranosyl-(1-4)-2,6-dideoxy-beta-D-ribo-hexopyranosyl)oxy)-12,14-dihydroxy-, (3beta,5beta,12beta)- (9 CI)
20830-75-5
C41-H64-O14
MW 780.92, MP about 265 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10376 Lung	9	0.6-45 ng/g	Not given	Samples taken at autopsy immediately after death "and from exhumed bodies buried from 2-5 wk." Coronary care cases RIA; HPLC; RIA
BLOOD; URINE; LIVER; HEART; KIDNEYS; BRAIN; LUNGS; VITREOUS HUMOR; BILE; AUTOPSIES; CADAVERS; CARDIOVASCULAR DISEASES; HEART DISEASES; DRUGS; DRUG THERAPY Margot, P.A.; Finkle, B.S.; Peat, M.A. 1983 Proceedings of Western Pharmacological Society 26:393-396				

Tissue	Cases Exposure Route	Range	Mean	General Information
10377 Muscle	a) 4 b) 7 c) 3 d) 8 e) 3 f) 4 g) 4 Ingestion Injection	a) 2-56 ng/g b) 17-89 ng/g c) 9-25 ng/g d) 14-54 ng/g e) 35-62 ng/g f) 8-127 ng/g g) 2-61 ng/g	a) 24 ng/g b) 40 ng/g c) 17 ng/g d) 33 ng/g e) 46 ng/g f) 48 ng/g g) 31 ng/g	a) Premature infants, acute therapy b) Full-term infants, acute therapy c) Older children >2 yrs, acute therapy d) Premature infants, chronic therapy e) Full-term infants, chronic therapy f) Children <2 yrs, chronic therapy g) Children >2 yrs, chronic therapy All had received therapeutic doses. Postmortem measurements. 1 day-18 yr olds RIA
10378 Pancreas	a) 3 b) 5 c) 3 d) 7 e) 3 f) 4 g) 2 Ingestion Injection	a) 19-41 ng/g b) 12-45 ng/g c) 6-427 ng/g d) 15-69 ng/g e) 18-110 ng/g f) 4-134 ng/g g) 3-24 ng/g	a) 31 ng/g b) 31 ng/g c) 159 ng/g d) 34 ng/g e) 68 ng/g f) 41 ng/g g) 13 ng/g	a) Premature infants, acute therapy b) Full-term infants, acute therapy c) Older children >2 yrs, acute therapy d) Premature infants, chronic therapy e) Full-term infants, chronic therapy f) Children <2 yrs, chronic therapy g) Children >2 yrs, chronic therapy All had received therapeutic doses. Postmortem measurements. 1 day-18 yr olds RIA
10379 Skin	a) 4 b) 7 c) 3 d) 7 e) 3 f) 4 g) 4 Ingestion Injection	a) 2-22 ng/g b) 9-125 ng/g c) 8-22 ng/g d) 6-43 ng/g e) 10-54 ng/g f) 6-66 ng/g g) 1-45 ng/g	a) 9 ng/g b) 35 ng/g c) 15 ng/g d) 18 ng/g e) 34 ng/g f) 30 ng/g g) 18 ng/g	a) Premature infants, acute therapy b) Full-term infants, acute therapy c) Older children >2 yrs, acute therapy d) Premature infants, chronic therapy e) Full-term infants, chronic therapy f) Children <2 yrs, chronic therapy g) Children >2 yrs, chronic therapy All had received therapeutic doses. Postmortem measurements. 1 day-18 yr olds RIA

(next page)

Digoxin (8 CI); Card-20(22)-enolide, 3-((O-2,6-dideoxy-beta-D-ribo-hexopyranosyl-(1-4)-O-2,6-dideoxy-beta-D-ribo-hexo pyranosyl-(1-4)-2,6-dideoxy-beta-D-ribo-hexopyranosyl)oxy)-12,14-dihydroxy-, (3beta,5beta,12beta)- (9 CI)
20830-75-5
C41-H64-O14
MW 780.92, MP about 265 C (decomp)

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
10880 Spleen	a) 3 b) 7 c) 3 d) 6 e) 3 f) 3 g) 4 Ingestion Injection	a) 8-13 ng/g b) 10-42 ng/g c) 9-20 ng/g d) 10-26 ng/g e) 7-26 ng/g f) 4-44 ng/g g) 1-13 ng/g	a) 11 ng/g b) 19 ng/g c) 14 ng/g d) 14 ng/g e) 18 ng/g f) 16 ng/g g) 7 ng/g	a) Premature infants, acute therapy b) Full-term infants, acute therapy c) Older children >2 yrs, acute therapy d) Premature infants, chronic therapy e) Full-term infants, chronic therapy f) Children <2 yrs, chronic therapy g) Children >2 yrs, chronic therapy All had received therapeutic doses. Postmortem measurements. 1 day-18 yr olds RIA
10881 Stomach	a) 4 b) 7 c) 3 d) 6 e) 3 f) 4 g) 4 Ingestion Injection	a) 12-28 ng/g b) 11-48 ng/g c) 11-26 ng/g d) 2-70 ng/g e) 16-62 ng/g f) 7-120 ng/g g) 6-149 ng/g	a) 20 ng/g b) 28 ng/g c) 20 ng/g d) 35 ng/g e) 43 ng/g f) 30 ng/g g) 54 ng/g	a) Premature infants, acute therapy b) Full-term infants, acute therapy c) Older children >2 yrs, acute therapy d) Premature infants, chronic therapy e) Full-term infants, chronic therapy f) Children <2 yrs, chronic therapy g) Children >2 yrs, chronic therapy All had received therapeutic doses. Postmortem measurements. 1 day-18 yr olds RIA
10882 Thymus	a) 3 b) 5 c) 1 d) 4 e) 2 f) 4 g) 0 Ingestion Injection	a) 8-18 ng/g b) 9-37 ng/g c) 145 ng/g d) 20-29 ng/g e) 9-30 ng/g f) 5-63 ng/g g) 0 ng/g	a) 12 ng/g b) 20 ng/g c) 145 ng/g d) 25 ng/g e) 20 ng/g f) 26 ng/g g) O ng/g	a) Premature infants, acute therapy b) Full-term infants, acute therapy c) Older children >2 yrs, acute therapy d) Premature infants, chronic therapy e) Full-term infants, chronic therapy f) Children <2 yrs, chronic therapy g) Children >2 yrs, chronic therapy All had received therapeutic doses. Postmortem measurements. 1 day-18 yr olds RIA
10883 Thyroid gland	a) 3 b) 6 c) 3 d) 4 e) 2 f) 3 g) 3 Ingestion Injection	a) 25-30 ng/g b) 11-75 ng/g c) 8-27 ng/g d) 19-55 ng/g e) 46-56 ng/g f) 8-11 ng/g g) 3-34 ng/g	a) 68 ng/g b) 30 ng/g c) 19 ng/g d) 33 ng/g e) 51 ng/g f) 9 ng/g g) 19 ng/g	a) Premature infants, acute therapy b) Full-term infants, acute therapy c) Older children >2 yrs, acute therapy d) Premature infants, chronic therapy e) Full-term infants, chronic therapy f) Children <2 yrs, chronic therapy g) Children >2 yrs, chronic therapy All had received therapeutic doses. Postmortem measurements. 1 day-18 yr olds RIA

BLOOD; HEART; KIDNEYS; MUSCLES; SKIN; ADIPOSE TISSUE; LIVER; SPLEEN; LUNGS; BRAIN; ADRENAL GLANDS; PANCREAS; STOMACH; GASTROINTESTINAL SYSTEM; GALL BLADDER; BLADDER; THYMUS; THYROID GLANDS; DELIBERATE EXPOSURE; PREMATURE INFANTS; INFANTS; CHILDREN; AUTOPSIES; HEART DISEASES; DRUG THERAPY; ANTIARRHYTHMIC AGENTS; FORENSIC MEDICINE; BIOACCUMULATION; DRUGS

Hastreiter, A.R.; van der Horst, R.L. 1984 Journal of Forensic Sciences 29(1):139-146

Digoxin (8 CI); Card-20(22)-enolide, 3-((O-2,6-dideoxy-beta-D-ribo-hexopyranosyl-(1-4)-O-2,6-dideoxy-beta-D-ribo-hexo pyranosyl-(1-4)-2,6-dideoxy-beta-D-ribo-hexopyranosyl)oxy)-12,14-dihydroxy-, (3beta,5beta,12beta)- (9 CI)
20830-75-5
C41-H64-O14
MW 780.92, MP about 265 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10884 Urine	8 Injection	a) Not given b) Not given	a) 0.197+/-0.36 mg b) 0.204+/-0.34 mg	a) Recovery on d 5-8 after 0.25 mg IV on d 5 b) Same with concurrent administration of 250 mg/d methyldopa d 1-8 No apparent effect of methyldopa on digoxin disposition. Healthy 21-40 yr old volunteers RIA
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ANTIHYPERTENSIVE AGENTS; DRUG INTERACTION; DRUGS				
May, C.A.; Vlasses, P.H.; Rocci, M.L., Jr.; Rotmensch, H.H.; Swanson, B.N.; Tannenbaum, R.P.; Ferguson, R.K.; Abrams, W.B. 1984 Journal of Clinical Pharmacology 24:386-389				

Tissue	Cases Exposure Route	Range	Mean	General Information
10885 Urine	8 Injection	a) Not given b) Not given	a) 14+/-3 ug b) 13.9+/-3.2 ug	a) Excretion during 2 hr of normal physical activity b) Excretion during 2 hr in supine position Initial dose 1 mg, maintenance dose 0.1875 mg b.i.d. for 14 d. Study began 8 hr after morning dose. Healthy volunteers RIA
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; DENMARK; ADULTS; HEART DISEASES; CARDIOVASCULAR DISEASES; ANALGESICS; DRUGS; DRUG THERAPY; BIOACCUMULATION				
Pedersen, K.E.; Madsen, J.; Kjaer, K.; Klitgaard, N.A.; Hvidt, S. 1983 Clinical Pharmacology and Therapeutics 34(3):303-308				

Tissue	Cases Exposure Route	Range	Mean	General Information
10886 Urine	2 Ingestion	a) 84-85% b) 59% c) 1-48% d) 47-51% % of dose	a) Not given b) Not given c) Not given d) Not given	a) 0.15 mg/d, 300 mg/d rifambin b) 0.08 mg/d, 30d after rifambin discontinued c) 0.25 mg/d, 300 mg/d rifambin d) 0.25 mg/d, 600 mg/d rifambin e) 0.125 mg/d, >1 mo after rifampin discontinued 0-24 hr collection, 150 uC tritium digoxin-12 alpha added to therapeutic doses. Levels are % radioactivity. a), b) one patient, d), e) one patient. Patients with renal disease, dependent on dialysis, 47 and 60 yr, 52 and 68 kg HPLC
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ADULTS; CASE HISTORIES; DRUGS; DRUG INTERACTION; METABOLISM				
Gault, H.; Longerich, L; Dawe, M.; Fine, A. 1984 Clinical Pharmacology and Therapeutics 35(6):750-754				

Digoxin (8 CI); Card-20(22)-enolide, 3-((O-2,6-dideoxy-beta-D-ribo-hexopyranosyl-(1-4)-O-2,6-dideoxy-beta-D-ribo-hexo pyranosyl-(1-4)-2,6-dideoxy-beta-D-ribo-hexopyranosyl)oxy)-12,14-dihydroxy-, (3beta,5beta,12beta)- (9 CI)
20830-75-5
C41-H64-O14
MW 780.92, MP about 265 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10887 Urine	16 Ingestion	a) 113.5-207.5 ug b) 133.0-200.0 ug c) 117.5-199.5 ug d) 147.0-196.5 ug	a) 155.1+/-26.4 ug b) 165.3+/-22.4 ug c) 161.8+/-22.5 ug) 166.9+/-15.9 ug	a) Two 0.25 mg tablets and 30 ml water b) Two 0.25 mg tablets and 240 ml water c) Two 0.2 mg capsules of digoxin solution and 30 ml water d) Two 0.2 mg capsules of digoxin solution and 240 ml water 0-48 cumulative excretion. Healthy volunteers RIA
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; CARDIOVASCULAR DISEASES; DRUG THERAPY; DRUGS; ANTIARRHYTHMIC AGENTS; BIOACCUMULATION Bustrack, J.A.; Katz, J.D.; Hull, J.H.; Fostrer, J.R.; Hammond, J.E.; Christenson, R.H. 1984 Journal of Pharmaceutical Sciences 73(10):1397-1400				

Tissue	Cases Exposure Route	Range	Mean	General Information
10888 Urine	20 Ingestion	47.0-57.2%	50.9%	% dose recovered on d 20-22 of menstrual cycle after 0.5 mg/d, oral, administered from d 10-22. Healthy volunteers, 19-30 yr old, mean wt 57 kg. RIA
URINE; BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; GERMANY; DRUG THERAPY; DRUG INTERACTION; DRUGS; HORMONES; BIOACCUMULATION; MENSTRUATION Bellman, O.; Ochs, H.R.; Knuchel, M.; Greenblatt, D.J. 1984 Journal of Clinical Pharmacology 24:474-479				

Tissue	Cases Exposure Route	Range	Mean	General Information
10889 Urine	5	3.2-102.5 ng/ml	Not given	Samples taken at autopsy immediately after death "and from exhumed bodies buried from 2-5 wk." Coronary care cases RIA; HPLC; RIA
10890 Vitreous humor	6	0.5-10.2 ng/g	Not given	Samples taken at autopsy immediately after death "and from exhumed bodies buried from 2-5 wk." Coronary care cases RIA; HPLC; RIA
BLOOD; URINE; LIVER; HEART; KIDNEYS; BRAIN; LUNGS; VITREOUS HUMOR; BILE; AUTOPSIES; CADAVERS; CARDIOVASCULAR DISEASES; HEART DISEASES; DRUGS; DRUG THERAPY Margot, P.A.; Finkle, B.S.; Peat, M.A. 1983 Proceedings of Western Pharmacological Society 26:393-396				

Disulfide, bis(diethylthiocarbamoyl) (8 CI); Thioperoxydicarbonic diamide [((H2N)C(S))2S2] , tetraethyl- (9 CI)
97-77-8
C10-H20-N2-S4
MW 296.54, MP 70 C, BP 1.17 C at 17 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10891 Blood, plasma	15 Ingestion	a) Not given b) Not given	a) 0.38+/-0.03 ug/ml b) 0.41+/-0.03 ug/ml S.E.	a) Single 250 mg dose, sampled over 72 hr b) 250 mg/d, d 4-15, sampled on days 8, 10, 12, 15-17 Peaks. Mean time to peaks, 8-10 hr. 19-58 yr old, 67-98 kg male alcoholics. 13 white, 2 black patients at the Alcoholic Treatment Unit, VA Hospital, Topeka, KS HPLC
10892 Breath	15 Ingestion	a) Not given b) Not given	a) 22.4+/-0.5% b) 31.3+/-0.8% S.E.	a) Single 250 mg dose, sampled over 72 hr b) 250 mg/d, d 4-15, sampled on days 8, 10, 12, 15-17. 19-58 yr old, 67-98 kg male alcoholics. 13 white, 2 black patients at the Alcoholic Treatment Unit, VA Hospital, Topeka, KS HPLC
10893 Urine	a) 6 b) 6 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 1.6+/-0.6% b) 5.7+/-1.6% c) 1.7+/-0.3% d) 8.3+/-1.6% S.E.	a) Single 250 mg dose, sampled over 72 hr, metabolite diethylamine (DEA) b) 250 mg/d, d 4-d 15, sampled on days 8, 10, 12, 15-17, DEA c) Single dose, metabolite diethyldithiocarbamate glucuronide (DDTC-glucuronide) d) Repeated dose, DDTC-glucuronide. 19-58 yr old, 67-98 kg male alcoholics. Patients at the Alcoholic Treatment Unit, VA Hospital, Topeka, KS HPLC
DRUGS; DRUG THERAPY; METABOLISM; METABOLITES; DELIBERATE EXPOSURE; BLOOD PLASMA; URINE; BREATH Faiman, M.D.; Jensen, J.C.; Lacoursiere, R.B. 1984 Clinical Pharmacology and Therapeutics 36(4):520-526				

Docosanamide, N-(1-beta-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)-
55726-67-1
C31-H55-N3-O6

Tissue	Cases Exposure Route	Range	Mean	General Information
10894 Blood, cells	5 Injection	30-2.0 ug/ml	Not applicable	1.5-24 rs, peak (30 ug/ml) at end of 90 min infusion of 200 mg. 6-24 hr levels higher than plasma levels, indicating sequestering in erythrocytes. Leukemic patients, 16-62 yr old HPLC
10895 Blood, plasma	7 Injection	a) 30-0.1 ug/ml b) 0.03-0.2 ug/ml c) 0.01-0 ug/ml	a) Not applicable b) Not applicable c) Not applicable	a) 1.5-24 hrs, peak (30 ug/ml) at end of 90 min infusion of 200 mg, 7 cases b) ARA-U metabolite, peak (0.6 ug/ml) at 4 hr after beginning of 90 min 200 mg infusion, 7 cases c) ARA-C metabolite, peak (0.1 ug/ml) from 2-10 hrs after 200 mg infusion, 2 cases. Leukemic patients, 16-62 yr old HPLC; Bioassay; GC/MS
10896 Bone marrow	a) 6 b) 4 Injection	a) Not given b) Not given	a) 4.5 ug/ml b) 2.5 ug/ml	a) 4 hr after end of 70 min infusion of 200 mg b) 12 hr after end of 70 min infusion of 200 mg 12 hr level higher than plasma level, indicating sequestering in marrow. ARA-C metabolite not detected. Leukemic patients, 16-62 yr old HPLC

(next page)

Docosanamide, N-(1-beta-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)-
55726-47-1
C31-H55-N3-O6

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
10207 Cerebrospinal fluid	9 Injection	<0.2-0.9 ug/ml	Not applicable	Level in 8 of 9 patients <0.2 ug/ml. ARA-C metabolite not detected. 50-400 mg/sq m infusion. Leukemic children, 1-10 yr old HPLC
10206 Urine	7 Injection	Not given	0.5%	ARA-C metabolite, to recovery in 24 hrs after 200 mg IV. Parent compound not detected. Leukemic patients, 16-62 yr old Bioassay
BLOOD; BLOOD PLASMA; CEREBROSPINAL FLUID; URINE; BONE MARROW; DELIBERATE EXPOSURE; ADULTS; JAPAN; LEUKEMIA; ANTITUMOR AGENTS; DRUGS; DRUG THERAPY; BIOACCUMULATION; METABOLITES; CHILDREN; INFANTS; NEOPLASMS Ueda, T.; Nakamura, T.; Ando, S.; Kagawa, D.; Sasada, M.; Uchino, H.; Johno, I.; Akiyama, Y. 1983 Cancer Research 43:3412-3416				

Ergocalciferol (8 CI); 9,10-Secoergosta-5,7,10(19),22-tetraen-3-ol, (3beta,5Z,7E,22E)- (9 CI)
50-14-6
C28-H44-O
MW 396.65, MP 115-118 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10300 Blood, serum	2 Ingestion	a) Not given b) Not given	a) 551 mg/ml b) 46 ng/ml	a) Mother, at delivery b) Umbilical cord During pregnancy and lactation took 1 g Ca, vitamin and mineral supplement (400 IU vitamin D, 350 mg Ca) and 100,000 IU vitamin D2/d. Normal winter maternal levels 0.31+/-0.22 ng/ml. Healthy infant. Her 27 yr old mother with familial multiple endocrine adenomatosis (10 yr duration) Ligand binding
BLOOD SERUM; MILK; DELIBERATE EXPOSURE; ADULTS; INFANTS; CALCIUM; MAGNESIUM; VITAMIN D; LACTATION; METABOLITES; DRUGS Greer, F.R.; Hollis, B.W.; Napoli, J.L. 1984 Journal of Pediatrics 105(1):61-64				

Ergocalciferol (8 CI); 9,10-Secoergosta-5,7,10(19),22-tetraen-3-ol, (3beta,5Z,7E,22E)- (9 CI)
50-14-6
C28-H44-O
MW 396.65, MP 115-118 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10400 Blood, serum	20	a) Undetectable-1.9 ng/ml b) 1.6-13.4 ng/ml c) 2.6-8.6 ng/ml d) Undetectable-11.3 pg/ml e) 12.2-67.6 pg/ml f) 8.0-40.3 pg/ml	a) Undetectable b) 7.3+/-3.7 ng/ml c) 5.1+/-1.7 ng/ml d) Undetectable e) 37.2+/-18.1 pg/ml f) 17.1+/-8.8 pg/ml	a) Metabolite, 25-hydroxyvitamin D2, in maternal serum before supplement b) After 20-30 wk (at delivery) of 400 IU/d c) In cord serum at delivery d) Metabolite, 1,25-dihydroxyvitamin D2, in maternal serum before supplement e) After 20-30 wk (at delivery) of 400 IU/d f) In cord serum at delivery Ratios of each metabolite to its D3 equivalent also reported, and transplacental transfer discussed. Healthy pregnant women and their newborns, Norway

BLOOD SERUM; CONSUMER EXPOSURE; DELIBERATE EXPOSURE; NORWAY; ADULTS; FETUS; NEWBORN; VITAMIN D; METABOLISM; METABOLITES; PREGNANCY; TRANSPLACENTAL TRANSFER; DRUGS

Markestad, T.; Aksnes, L.; Ulstein, M.; Aarskog, D. 1984 American Journal of Clinical Nutrition 40:1057-1063

Tissue	Cases Exposure Route	Range	Mean	General Information
10401 Milk	1 Ingestion	a) Not given b) Not given	a) 126 ng/ml b) 155 ng/ml	a) 14 d lactation, competitive binding assay b) 14 d lactation, UV Mother took 1 gm Ca, vitamin/mineral supplement (400 IU vitamin D, 350 mgCa), and 100,000 IU vitamin D/d. Normal winter levels 0.15+/-0.04 ng/ml. Estimated total vitamin D in milk 7000 IU/L (normal <20 IU/L). Breast-fed for 25 d. Infant intake 4500 IU/d, no symptoms of vitamin D toxicity but Ca levels elevated 27 yr old mother with familial multiple endocrine adenomatosis (10 yr duration) Competitive binding assay; UV

BLOOD SERUM; MILK; DELIBERATE EXPOSURE; ADULTS; INFANTS; CALCIUM; MAGNESIUM; VITAMIN D; LACTATION; METABOLITES; DRUGS

Greer, F.R.; Hollis, B.W.; Napoli, J.L. 1984 Journal of Pediatrics 105(1):61-64

Ergocryptine, 2-bromo (8 CI); Ergotaman-3',6',18-trione, 2-bromo-12'-hydroxy-2'-(1-methylethyl)-5'-(2-methylpropyl)-, (5'alpha)- (9 CI)
25614-03-3
C32-H40-Br-N5-O5
MW 654.62, MP 215-218 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10402 Blood, serum	Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 0.39 ug/l b) 0.36 ug/l c) 1.19 ug/l d) 1.26 ug/l e) 1.31 ug/l f) 0.51 ug/l g) 0.53 ug/l h) 1.5 ug/l i) 0.36 ug/l	a) 1 d after 1st dose b) 2 d after 1st dose c) 10 min after 2nd dose d) 5 hr after 2nd dose e) 1 d after 2nd dose f) 3 d after 2nd dose g) 17 d after 2nd dose h) 4 hr after single dose i) 28 d after single dose 50 mg IM. a)-g) adenoma patient, 2nd dose given 2 d after 1st dose. h)-i) volunteers. 45 yr old woman with a large, invasive pituitary adenoma. Healthy volunteers.
BLOOD SERUM; DELIBERATE EXPOSURE; CASE HISTORIES; ADULTS; DRUGS; DRUG THERAPY; ANTITUMOR AGENTS; BROMINE ORGANIC COMPOUNDS Landolt, A.M.; Del Pozo, E.; Hayek, J. 1984 Lancet 2(8394):111				

Erythromycin
114-07-8
C37-H67-N-O13
MW 733.93, MP 135-140 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10402 Blood, serum	7 Ingestion	a) 0.67-1.26+/-0.20 ug/ml b) 0.04-0.98+/-0.40 ug/ml	a) 1.04+/-0.20 ug/ml b) 0.55+/-0.40 ug/ml	a) Preoperative b) Postoperative Morbidly obese subjects who had bariatric surgery Microbiological
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; DRUGS; ANTIBIOTICS; COMPARATIVE EVALUATIONS; ERYTHROMYCINS; BIOAVAILABILITY Prince, R.A.; Pincheira, J.C.; Mason, E.E.; Printen, K.J. 1984 Journal of Clinical Pharmacology 24:523:527				

Estradiol (8 CI)¡ Estra-1,3,5(10)-triene-3,17-diol, (17beta)- (9 CI)
50-28-2
C18-H24-O2
MW 272.42, MP 178-179 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10404 Blood, serum	12 Vaginal	a) 20-1105 pg/mL b) 550-550 pg/mL c) 30-60 pg/mL	a) Not given b) Not given c) Not given	a) 0 and 4 hr after insertion of 0.5 mg micronized preparation tablet (Estrace) b) 12 hr after insertion, with repetitive administration on alternate days c) 36 hr after insertion of first and of second dose, regimen same as b) Seven cases in a). Five cases followed in b) and then c). Levels significantly higher than estrone levels during first 12 hr. Vaginal atrophy reversed, and hot flashes relieved, within about 2 wk. Some values estimated from figures. Ranges of means. Healthy 53-64 yr old postmenopausal women Mean levels of luteinising hormone and follicle-stimulating hormone significantly depressed for several hours RIA
BLOOD SERUM¡ DELIBERATE EXPOSURE¡ DRUGS¡ HORMONES¡ COMPARATIVE EVALUATIONS Martin, P.L.¡ Greaney, M.O.¡ Burnier, A.M.¡ Brooks, P.M.¡ Yen, S.S.C.¡ Quigley, M.E.T. 1984 Obstetrics and Gynecology 63(4):441-444				

Estrone (8 CI)¡ Estra-1,3,5(10)-trien-17-one, 3-hydroxy- (9 CI)
53-16-7
C18-H22-O2
MW 270.4, MP d-form 254.5-256 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10405 Blood, serum	a) 7 b) 5	a) 30-350 pg/mL b) 120-240 pg/mL	a) Not given b) Not given	a) 0 and 8 hr after vaginal insertion of 0.5 mg micronized preparation tablet, estradiol (Estrace) b) 12 hr after insertion, with repetitive administration on alternate days Levels higher than estradiol levels by 36 hr. Vaginal atrophy reversed, and hot flashes relieved, within about 2 wk. Ranges of means. Some values estimated from figures. Healthy 53-64 yr old postmenopausal women Mean levels of luteinising hormone and follicle-stimulating hormone significantly depressed for several hours RIA
BLOOD SERUM¡ DELIBERATE EXPOSURE¡ DRUGS¡ HORMONES¡ COMPARATIVE EVALUATIONS Martin, P.L.¡ Greaney, M.O.¡ Burnier, A.M.¡ Brooks, P.M.¡ Yen, S.S.C.¡ Quigley, M.E.T. 1984 Obstetrics and Gynecology 63(4):441-444				

Ethanaminium, 2-hydroxy-N,N,N-trimethyl-, salt with 2-hydroxybenzoic acid (1:1), mixt. wtih 2-hydroxybenzoic acid magnesium salt (2:1)
64425-86-7
C7-H8-O3.C7-H6-O3.C5-H14-N-O.1/2Mg

Tissue	Cases Exposure Route	Range	Mean	General Information
10406 Blood, serum	24 Ingestion	a) 20.0+/-8.1-3.4+/-3.5 mg/dL b) 24.9+/-4.1-7.0+/-4.5 mg/dL	a) Not given b) Not given	a) 2.5+/-1.1 and 23.5 hr after evening dose, 1500 mg twice daily b) 4.2+/-3.2 and 23.5 hr after evening dose, 3000 mg once daily Range of means. Healthy adults, 19-34 yr, 58.6-96.1 kg, no other drugs Tinnitus, GI symptoms HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; DRUGS; ANALGESICS; BIOAVAILABILITY; DRUG THERAPY Levitt, M.J.; Kuna, J. 1984 Journal of Pharmaceutical Sciences 73(7):977-979				

Ethanol, 2-(2-(4-(p-chloro-alpha-phenylbenzyl)-1-piperazinyl)ethoxy)- (8 CI); Ethanol, 2-(2-(4-((4-chlorophenyl)phenylmethyl)-1-piperazinyl)ethoxy)- (9 CI)
68-88-2
C21-H27-Cl-N2-O2
MW 374.92, MP 198 C (dihydrochloride)

Tissue	Cases Exposure Route	Range	Mean	General Information
10407 Blood	1 Ingestion	Not applicable	1.1 mg/L	Following death from overdose. Level 10 times that found after therapeutic dose. 46 yr old, 45.5 kg female suicide victim Edematous lungs with mucus, frothy fluid. Emphysema, atlectasis, pulmonary & pleural fibrosis. Pulmonary edema, hyperemia, alveolar hemorrhage. Fatty liver. GC
BLOOD; LIVER; BRAIN; URINE; SUICIDE; DELIBERATE EXPOSURE; DRUGS; SEDATIVES; ANTIHISTAMINES; AUTOPSIES Spiehler, V.R., Fukumoto, R.I. 1984 Journal of Analytical Toxicology 8:242-248				

Tissue	Cases Exposure Route	Range	Mean	General Information
10406 Blood, serum	12 Ingestion	a) Not given b) Not given c) Not given	a) 47.4+/-17.3 ng/ml b) 85.0+/-46.8 ng/ml c) 50.6+/-31.5 ng/ml S.E.	a) 2.0+/-0.9 hr after single 0.7 mg/kg dose b) 1.4 mg/kg 3X/d for 1 wk. Mean from last 4 d of treatment c) 0.7 mg/kg 3X/d for 1 wk. Mean from last 4 d of treatment Pruritis significantly supressed. Half-life increased with increasing patient age. 1-44.4 yr olds with severe atopic dermatitis Sedation HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; CHILDREN; DERMATITIS; ANTIPRURITIC AGENTS; DRUGS; DRUG THERAPY; ANTIHISTAMINES Estelle, F.; Simons, R.; Simons, K.J.; Becker, A.B.; Haydey, R.P. 1984 Journal of Pediatrics 104(1):123-127				

Ethanol, 2-(2-(4-(p-chloro-alpha-phenylbenzyl)-1-piperazinyl)ethoxy)- (8 Cl); Ethanol, 2-(2-(4-((4-chlorophenyl)phenylmethyl)-1-piperazinyl)ethoxy)- (9 Cl)
66-88-2
C21-H27-Cl-N2-O2
MW 374.92, MP 193 C (dihydrochloride)

Tissue	Cases Exposure Route	Range	Mean	General Information
10409 Brain	1 Ingestion	Not applicable	0.5 mg/kg	Following death from overdose. Level 10 times that found after therapeutic dose. 46 yr old, 45.5 kg female suicide victim Edematous lungs with mucus, frothy fluid. Emphysema, atlectasis, pulmonary & pleural fibrosis. Pulmonary edema, hyperemia, alveolar hemorrhage. Patty liver. GC
10410 Liver	1 Ingestion	Not applicable	15.5 mg/kg	Following death from overdose. Level 10 times that found after therapeutic dose. 46 yr old, 45.5 kg female suicide victim Edematous lungs with mucus, frothy fluid. Emphysema, atlectasis, pulmonary & pleural fibrosis. Pulmonary edema, hyperemia, alveolar hemorrhage. Patty liver. GC
10411 Urine	1 Ingestion	Not applicable	1.5 mg/L	Following death from overdose. Level 10 times that found after therapeutic dose. 46 yr old, 45.5 kg, female suicide victim Edematous lungs with mucus, frothy fluid. Emphysema, atlectasis, pulmonary & pleural fibrosis. Pulmonary edema, hyperemia, alveolar hemorrhage. Patty liver. GC
BLOOD; LIVER; BRAIN; URINE; SUICIDE; DELIBERATE EXPOSURE; DRUGS; SEDATIVES; ANTIHISTAMINES; AUTOPSIES Spiehler, V.R.; Fukumoto, R.I. 1984 Journal of Analytical Toxicology 8:242-243				

Ethanol, 2,2,2-trichloro-
115-20-8
C2-H3-Cl3-O
MW 149.42, MP 18 C, BP 151-153 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10412 Blood	1 Ingestion	Not applicable	3.8 mg/L	Died 2 hr after unknown intake of multiple drugs, including trazadone and ethanol. 31 yr old male with chronic depression Combined drug toxicity with pulmonary congestion, hemorrhage, edema, cerebral edema HPLC
CASE HISTORIES; DELIBERATE EXPOSURE; AUTOPSIES; SUICIDE; ANTIDEPRESSIVE AGENTS; DRUGS; DRUG ABUSE; BLOOD; URINE Root, I.; Ohlson, G.B. 1984 Journal of Analytical Toxicology 8:91-94				

Ethanol, 2,2,2-trichloro-
115-20-8
C2-H3-Cl3-O
MW 149.42, MP 18 C, BP 151-153 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10418 Blood	4	86+/-810 mg/l	136+/-123 mg/l	Multiple-drug related deaths, 1979-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Tissue	Cases Exposure Route	Range	Mean	General Information
10414 Urine	1 Ingestion	Not applicable	4.5 mg/L	Died 2 hr after unknown intake of multiple drugs, including trazadone and etnanol. 31 yr old male with chronic depression Combined drug toxicity with pulmonary congestion, hemorrhage, edema, cerebral edema HPLC
CASE HISTORIES; DELIBERATE EXPOSURE; AUTOPSIES; SUICIDE; ANTIDEPRESSIVE AGENTS; DRUGS; DRUG ABUSE; BLOOD; URINE Root, I.; Ohlson, G.B. 1984 Journal of Analytical Toxicology 8:91-94				

Ethanol, 2,2',2",2"'-((4,8-dipiperidinopyrimido(5,4-d)pyrimidine-2,6-diyl)dinitrilo)tet ra- (8 CI); Ethanol, 2,2',2",2"'-((4,8-di-1-piperidinylpyrimido(5,4-d)pyrimidine-2,6-diyl)dinitrilo)tetrakis- (9 CI)
58-32-2
C24-H40-N8-O4
MW 504.62, MP 165 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10415 Blood, plasma	a) 10 b) 10 Ingestion	a) 1.40+/-0.72-0.72+/-0.30 ug/ml b) 1.71+/-0.98-0.93+/-0.60 ug/ml	a) Not given b) Not given	a) 2 and 8 hr after 50 mg (persantine) 3X/d. At 0 hr, 0.85+/-0.50 ug/ml b) 2 and 12 hr after 75 mg 2X/d. At 0 hr 1.06+/-0.84 ug/ml Ranges of means. Steady state levels. Patients (mean age 54+/-9) hospitalized for coronary artery bypass grafting HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ANTICOAGULANTS; DRUG THERAPY; DRUGS; COMPARATIVE EVALUATIONS; METABOLISM Mahony, C.; Cox, J.L.; Bjorneson, J.D. 1983 Journal of Clinical Pharmacology 23:123-126				

Ethyl alcohol (8 CI); Ethanol (9 CI)
64-17-5
C2-H6-O
MW 46.07, MP -117.3 C, BP 78.32 C, VP 40 mm Hg at 19 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10416 Amniotic Fluid	6 Ingestion	0-0.81 mg/ml	Not given	0-3.5 hr after 0.3 gm/kg body wt 2 hr following breakfast. Mean peak 0.23+/-0.08 mg/ml from 1.5-2.5 hr. Mean elimination rate 0.08+/-0.03 mg/ml/hr, mean at 3.5 hr 0.14+/-0.06 mg/ml. Elective abortions, healthy 21 yr olds mean gestational age 119 d, Ontario, Canada. GLC

AMNIOTIC FLUID; BLOOD; DELIBERATE EXPOSURE; CANADA; ALCOHOLIC BEVERAGES; HEALTH HAZARDS; PREGNANCY; TRANSPLACENTAL TRANSFER; FETUS; ENVIRONMENTAL EXPOSURE; DRUGS
Brien, J.F.; Loomis, C.W.; Trammer, J.; McGrath, M. 1985 American Journal of Obstetrics and Gynecology 146:181-186

Tissue	Cases Exposure Route	Range	Mean	General Information
10417 Blood	16 Ingestion	a) 26-140 mg% b) Not given	a) 77.5+/-29.0 mg% b) 42.1+/-29.0 mg%	a) 2 hr after drink b) 5 hr after, 12 cases 0.8 ml/kg absolute ethanol, 100 ml quinine water with additional non-alcoholic mixes. Ethanol as a positive control 18-36 yr old healthy college students, Cincinnati, OH GLC

BLOOD; BREATH; DELIBERATE EXPOSURE; OHIO; ADULTS; NEUROLOGIC MANIFESTATIONS; ALCOHOLS; TOLUENE; DRUGS
Dick, R.B.; Setzer, J.V.; Wait, R.; Hayden, M.B.; Taylor, B.J.; Toloe, B.; Putz-Anderson, V. 1984 International Archives of Occupational and Environmental Health 54:91-109

Tissue	Cases Exposure Route	Range	Mean	General Information
10418 Blood	1 Ingestion	Not applicable	30 mg/dL	Postmortem levels after taking >12 Darvocet-N tablets 19 yr old male Caucasian, wt 77 kg, ht 1.85 m Unconsciousness, probably at >2 hr, <7 hr, death <14 hr, possibly <7 hr after ingestion of tablets GC

DELIBERATE EXPOSURE; DRUGS; SUICIDE; AUTOPSIES; BLOOD; URINE; ANALGESICS
Eberhardt, R.D.; Cash, D.K. 1984 Journal of Analytical Toxicology 8:246-247

Tissue	Cases Exposure Route	Range	Mean	General Information
10419 Blood	152 Ingestion	0.00-0.20 mg/dL	0.20+/-0.08 mg/dL	Acutely intoxicated or incapacitated adolescents admitted to hospital emergency department. Shown to be high risk group for alcohol and drug abuse. Describes program for handling crises and referral for treatment. 12-18 yr old, 85 male, 67 female. 13 mo period, 1980-1981

BLOOD; DELIBERATE EXPOSURE; WISCONSIN; ADOLESCENTS; ALCOHOLIC BEVERAGES; DRUGS
Stephenson, J.N.; Moberg, D.P.; Daniels, B.J.; Robertson, J.F 1984 Journal of the American Medical Association 252(14):1884-1888

Ethyl alcohol (8 CI); Ethanol (9 CI)
64-17-5
C2-H6-O
MW 46.07, MP -117.3 C, BP 78.32 C, VP 40 mm Hg at 19 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10420 Blood	1 Ingestion	Not applicable	2.43 mg/mL	Postmortem measurement. Victim drowned while in advanced stage of intoxication after having also taken 30 aspirin and 11 Halcion tablets. Level within therapeutic range. 70 yr old male suicide victim, NZ HPLC
DRUGS; DELIBERATE EXPOSURE; HYPNOTICS; SUICIDE; ALCOHOLS; NEW ZEALAND; BLOOD Wong, R.J. 1984 Journal of Analytical Toxicology 8:10-13				

Tissue	Cases Exposure Route	Range	Mean	General Information
10421 Blood	1 Ingestion	a) Not given b) 6-17 mmol/l	a) 6.4 mmol/l b) Not given	a) After 1st hemodialysis b) After 2nd and 3rd hemodialysis at 15 hr and at 31 hr after a). 53 yr old woman Dizziness from continous infusion of drug GC
ALCOHOLS; BLOOD; ACCIDENTAL POISONING; UNITED KINGDOM; DELIBERATE EXPOSURE; HEMODIALYSIS; DRUGS Saus, J.; Sanchis, R.; Siguenza, F.; Rubio, V. 1984 Lancet 1(8369):158				

Tissue	Cases Exposure Route	Range	Mean	General Information
10422 Blood	a) 56 b) 88,492 Ingestion	a) 0.15-0.35 vol% b) 0.10-0.20 vol%	a) 0.24 vol% b) Not given	a) Hospital admissions, alcohol-impaired drivers, 47 male, 9 female, 16-59 yr b) 66% of total DUI arrests, 1980-82 Blood alcohol concentration/breathalyzer levels. No convictions for DUI in a). 1979-1982, Virginia
BLOOD; DELIBERATE EXPOSURE; VIRGINIA; DRUG ABUSE; ALCOHOLIC BEVERAGES Maull, K.J.; Kinning, L.S.; Hickman, J.K.; 1984 Journal of the American Medical Association 252(14):1880-1883				

Tissue	Cases Exposure Route	Range	Mean	General Information
10423 Blood	36 Ingestion	0->/=0.10 g/dL	Not given	From these data, 36.9% of Utah drivers in single vehicle fatal accidents had levels of 0.10 gm/dL or greater. Drivers, Utah, 1982
BLOOD; CONSUMER EXPOSURE; DELIBERATE EXPOSURE; AUTOPSIES; DRUG ABUSE; FORENSIC MEDICINE; ALCOHOLS; ALCOHOLIC BEVERAGES; BIOACCUMULATION; BIOINDICATORS; DRUGS Sander, R. 1984 Journal of Forensic Sciences 29(4):963				

Ethyl alcohol (8 CI); Ethanol (9 CI)
64-17-5
C2-H6-O
MW 46.07, MP -117.3 C, BP 78.32 C, VP 40 mm Hg at 19 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10424 Blood	6 Ingestion	0-0.75 mg/ml	Not given	0-3.5 hr. Venous blood after 0.3 gm/kg body wt 2 hr following breakfast. Mean peak 0.48+/-0.18 mg/ml from 0.25-1.0 hr. Mean elimination rate 0.15+/-0.01 mg/ml/hr, mean at 3.5 hr 0.01 +/- 0.01 mg/ml. Elective abortions, healthy pregnant 21 yr olds, mean gestational age 119 d, elective abortions. Ontario, Canada. GLC

AMNIOTIC FLUID; BLOOD; DELIBERATE EXPOSURE; CANADA; ALCOHOLIC BEVERAGES; HEALTH HAZARDS; PREGNANCY; TRANSPLACENTAL TRANSFER; FETUS; ENVIRONMENTAL EXPOSURE; DRUGS

Brien, J.F.; Loomis, C.W.; Trammer, J.; McGrath, M. 1983 American Journal of Obstetrics and Gynecology 146:181-186

Tissue	Cases Exposure Route	Range	Mean	General Information
10426 Blood	1 Ingestion	Not applicable	900 mg/L	Autopsy samples. No distinguishing abnormalities. Death attributed to respiratory and cardiovascular depression from combined effects of ethanol and hydromorphine. 29 yr old house painter (80 kg, 170 cm). History of hypertension, unspecified street drug use, episodic drinking. No gross evidence of drug use. GC

DELIBERATE EXPOSURE; AUTOPSIES; DRUGS; ETHANOL; NARCOTICS; BLOOD; URINE; VITREOUS HUMOR; LIVER; BRAIN; DRUG ABUSE; KIDNEYS; CENTRAL NERVOUS SYSTEM DISEASES; FORENSIC MEDICINE; ANALGESICS

Levine, B.; Saady, J.; Fierro, M.; Valentour, J. 1984 Journal of Forensic Sciences 29(2):655-659

Tissue	Cases Exposure Route	Range	Mean	General Information
10426 Blood	1 Ingestion	Not applicable	0.09 g%	Died 2 hr after unknown intake of multiple drugs, including trasadone and diazepam. 31 yr old male with chronic depression Combined drug toxicity with pulmonary congestion, hemorrhage, edema, cerebral edema HPLC

CASE HISTORIES; DELIBERATE EXPOSURE; AUTOPSIES; SUICIDE; ANTIDEPRESSIVE AGENTS; DRUGS; DRUG ABUSE; BLOOD; URINE

Root, I.; Ohlson, G.B. 1984 Journal of Analytical Toxicology 8:91-94

Ethyl alcohol (8 CI); Ethanol (9 CI)
64-17-5
C2-H6-O
MW 46.07, MP -117.3 C, BP 78.32 C, VP 40 mm Hg at 19 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10427 Blood	a) 12 b) 45 Ingestion	a) 10-0 mmol/l b) 11-1 mmol/l	a) Not given b) Not given	a) 1 and 6 hr after 0.5 g ethanol/kg, in alcoholics. Level 8 mmol/l at 30 min b) In controls. Level 7 mmol/l at 30 min Ranges of means. Some values estimated from figure. Japanese alcoholics and healthy controls GC
BLOOD; DELIBERATE EXPOSURE; JAPAN; DRUG ABUSE; DRUGS; COMPARATIVE EVALUATIONS; ALCOHOLIC BEVERAGES; METABOLISM Harada, S.; Agarwal, D.P.; Goedde, H.W.; Takagi, S. 1983 Pharmacology Biochemistry and Behavior 18 Suppl.1:139-140				

Tissue	Cases Exposure Route	Range	Mean	General Information
10428 Blood	1 Ingestion	Not given	0.12%	Level 1 hr following accident. Automobile accident victim
BLOOD; CONSUMER EXPOSURE; ADULTS; AUTOPSIES; DRUG ABUSE; DRUGS; FORENSIC MEDICINE; ALCOHOLS; ALCOHOLIC BEVERAGES; BIOACCUMULATION Caseia, B.J.; Spitz, W.U. 1983 Journal of Forensic Sciences 28(4):1013-1015				

Tissue	Cases Exposure Route	Range	Mean	General Information
10429 Blood	7 Ingestion	a) Not given b) Not given	47.1 +or- 8.6 mgm%	Dose, 1.5 ml vodka/kg body wt given at hr 3 of 4 hr exposure to 80 ppm toluene. Measured at hr 4. Mean age 24.5 yr Alcohol inhibited toluene metabolism GC
COMPARATIVE EVALUATIONS; ALCOHOLS; ADULTS; BLOOD; TOLUENE; ALCOHOLIC BEVERAGES; HEALTH HAZARDS; INDUSTRIAL EMISSIONS; INDUSTRIAL PLANTS; METABOLISM; DRUGS; OCCUPATIONAL EXPOSURE; DELIBERATE EXPOSURE Waldron, H.A.; Cherry, N.; Johnston, J.D. 1983 International Archives of Occupational & Environmental Health 51:365-369				

Tissue	Cases Exposure Route	Range	Mean	General Information
10430 Blood	Ingestion	19-22 mmol/l	Not given	Peak after 0.8 g/kg ethanol. Non-alcoholics GC
BLOOD; DELIBERATE EXPOSURE; DRUGS; MEASUREMENT METHODS; ALCOHOLIC BEVERAGES Ryle, P.R.; Thomson, A.D. 1983 Lancet 2(8343):219-220				

Ethyl alcohol (8 CI); Ethanol (9 CI)
64-17-5
C2-H6-O
MW 46.07, MP -117.3 C, BP 78.32 C, VP 40 mm Hg at 19 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10421 Blood	a) 220 b) 116 c) 51	a) Not given b) Not given c) Not given	a) 90 mg/100 ml b) 0 mg/100 ml c) 0 mg/100 ml	a) Heroin-related deaths b) Control group c) Morphine-positive control group Members of a) group died from heroin overdose, b) group from natural or traumatic causes but with either cutaneous stigmata of IV narcotic use or positive blood morphine levels, and c) group is the morphine-positive subset of b) group. Study found ethanol use and guinine content of injectable drug both associated with heroin overdose. Autopsies 1/80-12/82, 30 or 31 yr olds GC

BLOOD; LUNGS; BILE; URINE; DELIBERATE EXPOSURE; ADULTS; DRUG ABUSE; NARCOTICS; AUTOPSIES; BIOACCUMULATION; HEALTH HAZARDS; DRUGS
Ruttenber, A.J.; Luke, J.L. 1984 Science 226:14-20

Tissue	Cases Exposure Route	Range	Mean	General Information
10452 Blood	14 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 51 mg b) 48 mg c) 42 mg d) 35 mg e) 57 mg f) 68 mg g) 67 mg h) 43 mg /100 mL	a) 30 min b) 40 min c) 60 min d) 160 min e) 30 min f) 40 min g) 60 min h) 160 min After 0.6 g/kg with a sugar-based drink (a-d) or placebo (e-h). Occasional moderate drinkers GC

ADULTS; DRUGS; BLOOD; BREATH; DELIBERATE EXPOSURE; ALCOHOLS; ALCOHOLIC BEVERAGES
Perl, J.; Starmer, G.A. 1985 Medical Journal of Australia 1(13):600

Tissue	Cases Exposure Route	Range	Mean	General Information
10453 Blood	10 Ingestion	a) 0.015-0.030 g/100 ml b) 0.018-0.045 g/100 ml c) 0.022-0.052 g/100 ml	a) Not given b) Not given c) Not given	a) 30 and 60 min after starting to drink Tooth LA light beer (20.51 g/L). 0.018 g/100 ml at 2.5 hr b) Tooheys Lite (24.78 g/L). 0.025 g/100 ml at 2.5 hr c) Carlton Light (28.4 g/L). 0.032 g/100 ml at 2.5 hr Ranges of means. Crossover study. Six 285 mL glasses at constant rate for 1 hr. Values estimated from figure. Rugby players consuming at least 50 g alcohol/wk, age 25+/-0.2, wt 81.8+/-2.2 kg, ht 179+/-20 cm GC

BLOOD; DELIBERATE EXPOSURE; DRUGS; COMPARATIVE EVALUATIONS; ALCOHOLS; ALCOHOLIC BEVERAGES
Perl, J.; Starmer, G.A.; Bird, K.D. 1983 Medical Journal of Australia 1(13):599

Ethyl alcohol (8 CI); Ethanol (9 CI)
64-17-5
C2-H6-O
MW 46.07, MP -117.3 C, BP 78.32 C, VP 40 mm Hg at 19 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10484 Blood	8 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 0.94+/-0.23 mg/ml b) 0.98+/-0.20 mg/ml c) 1.46+/-0.32 mg/ml d) 1.53+/-0.25 mg/ml	a) Peak after 1 g/kg, followed by naloxone injections b) Dose followed by placebo injection c) Peak after 1.5 g/kg, followed by naloxone d) Dose followed by placebo Crossover study. Regimen: ethanol drunk during 30 min, then at about 1 hr intervals, two successive doses (0.4 mg and 2.0 mg) naloxone or placebo. Mean ethanol levels during first and second naloxone injections 1.42 and 1.44 mg/ml, respectively. No obvious pharmacokinetic drug interaction. Psychomotor performance, inebriation tests unaffected. Healthy volunteers, social drinkers, mean age 22.4+/-2.2, normal wt Alcolmeter

BLOOD; DELIBERATE EXPOSURE; DRUG INTERACTION; DRUGS; PSYCHOTROPIC DRUGS; ALCOHOLS
Nuotto, E.; Palva, E.S.; Seppala, T. 1984 Acta Pharmacologica et Toxicologica 54:278-284

Tissue	Cases Exposure Route	Range	Mean	General Information
10485 Blood	600 Ingestion	a) Not given b) Not given	a) 1.43+/-0.96 g/L b) 1.81+/-0.74 g/L	a) Drivers involved in single car accidents, killed in crash or lived <1 hr and received no vigorous medical treatment b) 476 cases from a) with positive blood ethanol Additional data in article. 31.2+/-14.5 yr olds, vehicle fatalities, 1978-1981, NC GC

BLOOD; NORTH CAROLINA; AUTOPSIES; DRUGS; DRUG ABUSE; DRUG INTERACTION; PSYCHOTROPIC DRUGS; SEDATIVES; HYPNOTICS; ANTICONVULSANTS; FORENSIC MEDICINE; ALCOHOLS; DELIBERATE EXPOSURE
Mason, A.P.; McBay, A.J. 1984 Journal of Forensic Sciences 29(4):987-1026

Tissue	Cases Exposure Route	Range	Mean	General Information
10486 Blood	23 Ingestion	40-400 mg/dL	Not given	Ethanol overdose, with simultaneous chlordiazepoxide overdose levels of 2-25 mg/L. Emergency unit cases, San Diego, 10/74-10/84. Most were chronic alcoholics. Age 17-62. Tachycardia, lethargy, dysarthria, hyper- and hypotension, seizures, nystagmus, ataxia, hyporeflexia, mydriasis

BLOOD; CALIFORNIA; DELIBERATE EXPOSURE; ADULTS; ADOLESCENTS; NEUROLOGIC MANIFESTATIONS; DRUGS; ALCOHOLS; DRUG INTERACTION; DRUG ABUSE
Bailey, D.N. 1984 Clinical Toxicology 22(5):433-446

Ethyl alcohol (8 CI); Ethanol (9 CI)
64-17-5
C2-H6-O
MW 46.07, MP -117.3 C, BP 78.32 C, VP 40 mm Hg at 19 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10437 Blood, plasma	4 Ingestion	10.4-16.3 mmol/l	13.5 mmol/l	Measured 1.25 hr after last 0.15 g/kg/h maintenance dose. Healthy volunteers, 22-25 yr old
BLOOD PLASMA; URINE; BREATH; DELIBERATE EXPOSURE; DENMARK; ADULTS; TOLUENE; ALCOHOLIC BEVERAGES; BIOACCUMULATION; INHALATION; METABOLITES; DRUGS Dossing, M.; Baelum, J.; Hansen, S.H.; Lundqvist, G.R. 1984 International Archives of Occupational and Environmental Health 54:309-315				

Tissue	Cases Exposure Route	Range	Mean	General Information
10438 Blood, plasma	1 Ingestion	Not applicable	1.9 g/l	4 hr after 2.5 g simeldine and 6 pt beer. 32 yr old overdose patient
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; ANTIDEPRESSIVE AGENTS; DRUGS; ALCOHOLS; DRUG ABUSE Chapman, B.J.; Proudfoot, A.T.; Dawling, S. 1983 British Medical Journal 287:1672-1673				

Tissue	Cases Exposure Route	Range	Mean	General Information
10439 Blood, plasma	9 Ingestion	a) 10-45 mg/100 ml b) 20-65 mg/100 ml	a) Not applicable b) Not applicable	a) 15-150 min, peak (50 mg/100 ml) 120 min after 0.5 ml/kg b) 15-150 min, peak (75 mg/ml) 90 min after 1.0 ml/kg Estimated from graph. Healthy volunteers, 22-46 yr old GC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; DRUG INTERACTION; ALCOHOLS; ALCOHOLIC BEVERAGES; ALCOHOLIC BEVERAGES; BIOACCUMULATION Eisenhofer, G.; Lambie, D.G.; Johnson, R.H. 1983 Clinical Pharmacology and Therapeutics 34(2):143-147				

Tissue	Cases Exposure Route	Range	Mean	General Information
10440 Blood, plasma	9 Ingestion	Not given	a) 0.84+/-0.11 ug/ml b) 0.81+/-0.12 ug/ml c) 0.83+/-0.11 umg/ml	a) Placebo b) Amantadine (100 mg dose) c) Bromocriptine (2.5+2.5 mg dose Drugs given with ethanol. No modification of psychomotor effects of ethanol observed. Healthy student volunteers, mean age 23 yr Alcolmeter
BLOOD PLASMA; DELIBERATE EXPOSURE; FINLAND; ADULTS; DRUG INTERACTION; DRUG THERAPY; ALCOHOLIC BEVERAGES; BIOLOGICAL MONITORING; DRUGS Nuotto, E.; Mattila, M.J. 1984 Acta Pharmacologica et Toxicologica 55:168-173				

Ethyl alcohol (8 CI); Ethanol (9 CI)
64-17-5
C2-H6-O
MW 46.07, MP -117.3 C, BP 78.32 C, VP 40 mm Hg at 19 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10441 Blood, whole	289 Ingestion	a) 0.01-0.10% b) 0.11-0.20% c) 0.21-0.30% d) 0.31-0.40% e) 0.41-0.50%	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 44 cases, 76 b) 51 cases, 78 c) 35 cases, 51 d) 10 cases, 13 e) 1 case, 1 Second numbers indicate number of occurrences of other drugs found. Emergency room patients, University of California Medical Center, San Diego, CA GC

BLOOD; DELIBERATE EXPOSURE; CALIFORNIA; ADULTS; ADOLESCENTS; DRUGS; DRUG ABUSE; ALCOHOLS
Bailey, D.N. 1984 Clinical Toxicology 22(5):463-471

Tissue	Cases Exposure Route	Range	Mean	General Information
10442 Breath	18 Ingestion	a) Not given b) Not given c) not given d) Not given	a) 96.0+/-27.0 ppm b) 67.0+/-25.0 ppm c) 50.0+/-22.0 ppm d) 33.4+/-15.3 ppm	a) 1 hr after ingestion b) 3 hr after ingestion, 17 cases c) 4 hr after ingestion, 6 cases d) 5.5 hr after ingestion, 11 cases 0.8 ml/kg absolute ethanol, 100 ml quinine water with additional non-alcoholic mixes. Ethanol used as a positive control. 18-38 yr old healthy college students, Cincinnati, OH

BLOOD; BREATH; DELIBERATE EXPOSURE; OHIO; ADULTS; NEUROLOGIC MANIFESTATIONS; ALCOHOLS; TOLUENE; DRUGS
Dick, R.B.; Setzer, J.V.; Wait, R.; Hayden, M.B.; Taylor, B.J.; Toles, B.; Putz-Anderson, V. 1984 International Archives of Occupational and Environmental Health 54:91-109

Tissue	Cases Exposure Route	Range	Mean	General Information
10443 Breath	14 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 39 mg b) 32 mg c) 30 mg d) 23 mg e) 58 mg f) 60 mg g) 53 mg h) 26 mg /100 mL	a) 40 min b) 60 min c) 80 min d) 160 min e) 40 min f) 60 min g) 80 min h) 160 min After 0.6g/kg with a sugar-based drink (a-d) or placebo (e-h). Occasional moderate drinkers Intoxilyser

ADULTS; DRUGS; BLOOD; BREATH; DELIBERATE EXPOSURE; ALCOHOLS; ALCOHOLIC BEVERAGES
Peri, J.; Starmer, G.A. 1983 Medical Journal of Australia 1(13):600

Ethyl alcohol (8 CI); Ethanol (9 CI)
64-17-5
C2-H6-O
MW 46.07, MP -117.3 C, BP 78.32 C, VP 40 mm Hg at 19 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10444 Saliva	10 Ingestion	140-240 mg/dL	172 mg/dL	Also screened for presence of other drugs. Diazepam, cannabinoids, and cocaine were detected (levels not reported). Arrested for driving violations, 21-47 yr olds GC

SALIVA; CONSUMER EXPOSURE; ADULTS; CANADA; NARCOTICS; PSYCHOTROPIC DRUGS; FORENSIC MEDICINE; ALCOHOLS; BIOACCUMULATION; BIOINDICATORS; ALCOHOLIC BEVERAGES; DRUGS
Peel, H.W.; Perrigo, B.J.; Mikhael, N.Z. 1984 Journal of Forensic Sciences 29(1):185-189

Tissue	Cases Exposure Route	Range	Mean	General Information
10445 Urine	1 Ingestion	Not applicable	80 mg/dL	Postmortem levels after taking >12 Darvocet-N tablets 19 yr old male Caucasian, wt 77 kg, ht 1.85 m Unconsciousness, probably at >2 hr, <7 hr, death <14 hr, possibly <7 hr after ingestion of tablets GC

DELIBERATE EXPOSURE; DRUGS; SUICIDE; AUTOPSIES; BLOOD; URINE; ANALGESICS
Eberhardt, R.D.; Cash, D.K. 1984 Journal of Analytical Toxicology 8:246-247

Tissue	Cases Exposure Route	Range	Mean	General Information
10446 Urine	1 Ingestion	Not applicable	1500 mg/L	Autopsy samples. No distinguishing abnormalities. Death attributed to respiratory and cardiovascular depression from combined effects of ethanol and hydromorphine. 29 yr old house painter (80 kg, 170 cm). History of hypertension, unspecified street drug use, episodic drinking. No gross evidence of drug use. GC
10447 Vitreous humor	1 Ingestion	Not applicable	1100 mg/L	Autopsy samples. No distinguishing abnormalities. Death attributed to respiratory and cardiovascular depression from combined effects of ethanol and hydromorphine. 29 yr old house painter (80 kg, 170 cm). History of hypertension, unspecified street drug use, episodic drinking. No gross evidence of drug use. GC

DELIBERATE EXPOSURE; AUTOPSIES; DRUGS; ETHANOL; NARCOTICS; BLOOD; URINE; VITREOUS HUMOR; LIVER; BRAIN; DRUG ABUSE; KIDNEYS; CENTRAL NERVOUS SYSTEM DISEASES; FORENSIC MEDICINE; ANALGESICS
Levine, B.; Saady, J.; Fierro, M.; Valentour, J. 1984 Journal of Forensic Sciences 29(2):655-659

Ethylamine, N,N-dimethyl-2-((o-methyl-alpha-phenylbenzyl)oxy)- (8 CI); Ethanamine, N,N-dimethyl-2-((2-methylphenyl)phenylmethoxy)- (9 CI)
52-90-7
C18-H23-N-O
MW 269.37, BP 195 C at 12 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10446 Blood	1 Ingestion	15.1-20.5 ug/ml	18.1 ug/ml	Average of 4 determinations. New assay method described. Data on stomach content levels also given. 19 yr old suicide victim Death due to overdose from ingestion of Disipal GC
10449 Liver	1 Ingestion	237-247 ug/ml	242 ug/ml	Average of 4 determinations. New assay method described. Data on stomach content levels also given. 19 yr old suicide victim Death due to overdose from ingestion of Disipal GC
10450 Urine	1 Ingestion	6.6-7.3 ug/ml	7.0 ug/ml	Average of 4 determinations. New assay method described. Data on stomach content levels also given. 19 yr old suicide victim Death due to overdose from ingestion of Disipal GC
BLOOD; LIVER; URINE; CONSUMER EXPOSURE; ADULTS; NEW ZEALAND; SUICIDE; AUTOPSIES; NEUROMUSCULAR DISEASES; DRUG THERAPY; DRUGS; FORENSIC MEDICINE; BIOACCUMULATION; DRUG ABUSE Wilkinson, L.F.; Thomson, B.M.; Pannell, L.K. 1983 Journal of Analytical Toxicology 7:72-75				

Ethylamine, 1-methyl-2-(2,6-xylyloxy)- (8 CI); 2-Propanamine, 1-(2,6-dimethylphenoxy)- (9 CI)
81836-71-6
C11-H17-N-O
MW 179.26

Tissue	Cases Exposure Route	Range	Mean	General Information
10451 Blood, plasma	56	0.4-2.4 mg/L	Not given	"Troughs" after 3-24 mg/kg body wt/d. Dosage closely related to level. Most patients have no side effects at 0.75-2.0 mg/L. Improved assay procedure. Patients with ventricular arrhythmias LC
BLOOD PLASMA; DELIBERATE EXPOSURE; HEART DISEASES; ANTIARRHYTHMIC AGENTS; MEASUREMENT METHODS Mastropaolo, W.; Holmes, D.R.; Osborn, M.J.; Rooke, J.; Moyer, T.P. 1984 Clinical Chemistry 30(2):319-322				

Ethylamine, 1-methyl-2-(2,6-xylyloxy)- (8 CI); 2-Propanamine, 1-(2,6-dimethylphenoxy)- (9 CI)
31828-71-4
C11-H17-N-O
MW 179.39

Tissue	Cases Exposure Route	Range	Mean	General Information
10462 Blood, serum	5	0.5-1.0 ug/ml	0.6 ug/ml	Trough, patients with at least 70% reduction in ventricular ectopic frequency. Study included patients whose serum levels were not reported. 7 of 13 patients responded favorably. Patients with ventricular ectopy Tremors, paresthesias, ataxia, insomnia, nausea, diarrhea, metallic taste, palpitations
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; ANTIARRHYTHMIC AGENTS; DRUGS; DRUG THERAPY; BIOACCUMULATION; COMPARATIVE EVALUATIONS Feester, P.E.; Hanson, C.D. 1983 Clinical Pharmacology and Therapeutics 34(2):136-143				

Ethylamine, 2-(diphenylmethoxy)-N,N-dimethyl- (8 CI); Ethanamine, 2-(diphenylmethoxy)-N,N-dimethyl- (9 CI)
58-73-1
C17-H21-N-O
MW 255.35, BP 150-165 C at 2.0 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10453 Bile	1 Ingestion	Not applicable	1.9 mg/L (free)	At autopsy. Known medication was 100 mg/d simelidine, unstated amounts methyprylon, oxazepam and tetracycline. 30 yr old female under psychiatric care, death from self-inflicted gunshot wound. GC/MS
10454 Blood	1 Ingestion	Not applicable	0.30 mg/L	At autopsy. Known medication was 100 mg/d simelidine, unstated amounts methyprylon, oxazepam and tetracycline. 30 yr old female under psychiatric care, death from self-inflicted gunsho wound. GC/MS
DRUGS; DELIBERATE EXPOSURE; AUTOPSIES; SUICIDE; BLOOD; URINE; BRAIN; BILE Semple, D.J. 1984 Journal of Analytical Toxicology 8:285-287				

Tissue	Cases Exposure Route	Range	Mean	General Information
10455 Blood	a) 1 b) 13 c) 4	a) Not applicable b) 0.3-4.5 mg/l c) 0.70-11 mg/l	a) 9.2 mg/l b) 1.0 mg/l c) 5.8+/-5.5 mg/l	a) Single-drug death, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths, 1979-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooke, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Ethylamine, 2-(diphenylmethoxy)-N,N-dimethyl- (8 CI); Ethanamine, 2-(diphenylmethoxy)-N,N-dimethyl- (9 CI)
58-73-1
C17-H21-N-O
MW 255.35, BP 160-165 C at 2.0 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10456 Blood, plasma	a) 9 b) 8 Injection	a) 180-15 ng/ml b) 200-4 ng/ml	a) Not given b) Not given	a) Patients with cirrhosis, mean dose 54.8+/-3.8 mg IV b) Controls, 57.1+/-3.4 mg IV 0-48 hr after dosing. Dosage basis for most, 0.8 mg/kg body wt estimated from graph. 9 patients with alcohol-related cirrhosis of the liver, mean age 49.1 yr, white and Latin Americans. 8 normal controls, mean age 43.4 yr GC

BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; HEALTH HAZARDS; CIRRHOSIS; DRUGS; METABOLISM; SEDATIVES; TRANQUILISERS; HYPNOTICS; DRUG THERAPY; LIVER DISEASES
Meredith, C.G.; Christian, C.D., Jr.; Johnson, R.F.; Madhavan, S.V.; Schenker, S. 1984 Clinical Pharmacology and Therapeutics 35(4):474-479

Tissue	Cases Exposure Route	Range	Mean	General Information
10457 Blood, plasma	3 Ingestion	a) Not given b) Not given c) Not given	a) 52.3+/-9.5 ng/ml b) 110.3+/-19.9 ng/ml c) 105.0+/-6.6 ng/ml	a) 1 hr b) 2 hr c) 8 hr After 50 mg as hydrochloride. Healthy volunteers, 21-30 yr old, 11 males, 3 females. GC

SALIVA; BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; CANADA; DRUGS; SEDATIVES; BENZODIAZEPINES; ANTIHISTAMINES; NARCOTICS; ANALGESICS; FORENSIC MEDICINE; DIAZEPAMS; BIOACCUMULATION
Sharp, M.E.; Wallace S.M.; Hindmarsh, K.W.; Peel, H.W. 1985 Journal of Analytical Toxicology 7:11-14

Tissue	Cases Exposure Route	Range	Mean	General Information
10458 Brain	1 Ingestion	Not applicable	0.37 mg/kg	At autopsy. Known medication was 100 mg/d zimelidine, unstated amounts methyprylon, oxazepam and tetracycline. 30 yr old female under psychiatric care, death from self-inflicted gunshot wound. GC/MS
10459 Liver	1 Ingestion	Not applicable	0.77 mg/kg	At autopsy. Known medication was 100 mg/d zimelidine, unstated amounts methyprylon, oxazepam and tetracycline. 30 yr old female under psychiatric care, death from self-inflicted gunshot wound. GC/MS

DRUGS; DELIBERATE EXPOSURE; AUTOPSIES; SUICIDE; BLOOD; URINE; BRAIN; BILE
Semple, D.J. 1984 Journal of Analytical Toxicology 8:285-287

Ethylamine, 2-(diphenylmethoxy)-N,N-dimethyl- (8 CI); Ethanamine, 2-(diphenylmethoxy)-N,N-dimethyl- (9 CI)
58-73-1
C17-H21-N-O
MW 255.35, BP 150-165 C at 2.0 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10460 Saliva	5 Ingestion	a) Not given b) Not given c) Not given	a) 15.5+/-2.5 ng/ml b) 40.0+/-6.0 ng/ml c) 34.3+/-7.6 ng/ml	a) 1 hr b) 2 hr c) 3 hr After 50 mg as hydrochloride. Healthy volunteers, 21-30 yr old, 11 males, 3 females. GC
SALIVA; BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; CANADA; DRUGS; SEDATIVES; BENZODIAZEPINES; ANTIHISTAMINES; NARCOTICS; ANALGESICS; FORENSIC MEDICINE; DIAZEPAMS; BIOACCUMULATION Sharp, M.E.; Wallace S.M.; Hindmarsh, K.W.; Peel, H.W. 1983 Journal of Analytical Toxicology 7:11-14				

Tissue	Cases Exposure Route	Range	Mean	General Information
10461 Urine	a) 9 b) 8 Injection	a) Not given b) Not given	a) 2.43+/-0.40% b) 1.88+/-0.35%	a) Patients with cirrhosis, mean dose 54.8+/-2.8 mg IV b) Controls, 57.1+/-3.4 mg IV Total output is 48 hr. Dosage basis for most, 0.8 mg/kg body wt. 9 patients with alcohol-related cirrhosis of the liver, mean age 49.1 yr, white and Latin Americans. 8 normal controls, mean age 43.4 yr
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; HEALTH HAZARDS; CIRRHOSIS; DRUGS; METABOLISM; SEDATIVES; TRANQUILIZERS; HYPNOTICS; DRUG THERAPY; LIVER DISEASES Meredith, C.G.; Christian, C.D., Jr.; Johnson, R.F.; Madhavan, S.V.; Schenker, S. 1984 Clinical Pharmacology and Therapeutics 35(4):474-479				

Ethylamine, 2-(p-(1,2-diphenyl-1-butenyl)phenoxy)-N,N-dimethyl-, (Z)- (8 CI); Ethanamine, 2-(4-(1,2-diphenyl-1-butenyl)phenoxy)-N,N-dimethyl-, (Z)- (9 CI)
10540-29-1
C26-H29-N-O
MW 371.52, MP 96-98 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10462 Blood, serum	5	a) 80-180 ng/ml b) 204-265 ng/ml c) 5-6 ng/ml d) 77-87 ng/ml e) 163-220 ng/ml f) 12-40 ng/ml g) 91-123 ng/ml h) 201-240 ng/ml i) 12-21 ng/ml	a) 145 ng/ml b) 234 ng/ml c) 5 ng/ml d) 81 ng/ml e) 193 ng/ml f) 32 ng/ml g) 111 ng/ml h) 214 ng/ml i) 17 ng/ml	a) 77-276 d of 10 mg b.i.d., 1 case, parent drug b) N-desmethyl-metabolite c) Hydroxylated metabolite d) 34-270 d of 10 mg b.i.d., 1 case, parent drug e) N-desmethyl-metabolite f) Hydroxylated metabolite g) 35-256 d of 10 mg b.i.d., 1 case, parent drug h) N-desmethyl-metabolite i) Hydroxylated metabolite. Cancer patients HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; DISEASES; CARCINOMAS; ANTITUMOR AGENTS; DRUGS; DRUG THERAPY; CHEMOTHERAPY; BIOACCUMULATION; METABOLITES; SURGERY Jordan, V.C.; Dain, R.R.; Brown, R.R.; Gosden, B.; Santos, M.A. 1983 Cancer Research 43:1446-1450				

Ethylene glycol (8 CI); 1,2-Ethanediol (9 CI)
107-21-1
C2-H6-O2
MW 62.1, BP 197.5 C, VP 0.05 mm Hg at 20 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10468 Blood	2	6.2-890 mg/l	448 mg/l	Single-drug deaths, 1975-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Ethylenediamine (8 CI); 1,2-Ethanediamine (9 CI)
107-15-3
C2-H8-N2
MW 60.10, MP +8.5 C, BP 116-117 C, VP 10.7 mm Hg at 20 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10464 Blood, plasma	1 Ingestion Injection	a) 2-0.1 ug/ml b) 0-0.3 ug/ml	a) Not given b) Not given	a) End of, and 1.5 hr after, 6 min IV infusion of 36 mg (as 250 mg aminophylline) b) 15 and 45 min after 45 mg, oral, (as 300 mg aminophylline tablets). 0.12 ug/ml at 2 hr 1 of 3 cases. Estimated from figure. Healthy 22-26 yr old volunteers, wt 65-95 kg HPLC
10465 Urine	3 Ingestion Injection	a) 12-24% b) 2-5%	a) 18% b) 3%	a) After IV infusion of 36 mg (as 250 mg aminophylline) b) After 45 mg (as 300 mg aminophylline tablets) Recovery of unchanged drug in 0-24 hr. Healthy 22-26 yr old volunteers, wt 65-95 kg HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; DRUG INTERACTION; DRUGS; THEOPHYLLINES; METABOLISM Cotgreave, I.A.; Caldwell, J. 1983 Journal of Pharmacy and Pharmacology 35:378-382				

Fluoride
16984-48-8
F
AtW 18.9984

Tissue	Cases Exposure Route	Range	Mean	General Information
10466 Saliva	9	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.015+/-0.003 ppm b) 0.02+/-0.003 ppm c) 0.016+/-0.003 ppm d) 0.01+/-0.002 ppm e) 0.007+/-0.002 ppm f) 0.008+/-0.002 ppm	a) 1st day b) 2nd day c) 3rd day d) 4th day e) 5th day f) Control, before F application After application of 4.8-5.1 mg to dental plates, thickness of coating did not affect release constant but did affect duration of release. Children undergoing orthodontic treatment, 7-12 yr, drinking water approx 0.4 ppm F, no F supplements, Jerusalem area
SALIVA; DELIBERATE EXPOSURE; ISRAEL; CHILDREN; DENTISTRY; FLUORIDE; DRUGS Harary, D.; Freidman, M. 1984 Journal of Pharmaceutical Sciences 73(1):135-136				

Fluorocarbon, total (No postings in CHEMLINE).

Tissue	Cases Exposure Route	Range	Mean	General Information
10467 Blood	a) 9 b) 1 c) 2	a) 0.46-11 ppm b) Not applicable c) 4-14 ppm	a) 5.8 ppm b) 6.1 ppm c) 9.0 ppm	a) Single-drug deaths, 1975-1980 b) Non-drug related death, 1975-1980 c) Multiple-drug related deaths, 1979-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooke, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Folic acid (8 CI); L-Glutamic acid, N-(4-(((2-amino-1,4-dihydro-4-oxo-6-pteridinyl)methyl)amino)benzoyl)- (9 CI)
59-30-3
C19-H19-N7-O6
MW 441.40

Tissue	Cases Exposure Route	Range	Mean	General Information
10468 Blood, serum	125 Ingestion	a) 11-11.5 nmol/l b) 9.5-9 nmol/l c) 9-7 nmol/l d) 7.5-6 nmol/l	a) Not given b) Not given c) Not given d) Not given	a) No drugs. Peak 17 nmol/l at 17-24 wk pregnancy, 12 cases b) Carbamazepine alone. Peak 16 nmol/l at 33-40 wk, 20 cases c) Combination of drugs. Peak 10 nmol/l at 25-32 wk, 48 cases d) Phenytoin alone. Peak 9 nmol/l at 33-40 wk, 53 cases 9-16 and 8 wk postpartum. All taking 100-1000 ug/d (mean 500 ug) folic acid. Levels in mothers whose babies died or had birth defects not different from mothers with normal babies. Measured as folate. Pregnant epileptics Competetive protein binding
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; DRUGS; PREGNANCY; DRUG THERAPY; NEUROLOGIC MANIFESTATIONS; DRUG INTERACTION Hillesmaa, V.K.; Teramo, K.; Granstrom, M.-L.; Bardy, A.H. 1983 British Medical Journal 287:577-579				

gamma-Vinyl-gamma-aminobutyric acid (No postings in CHEMLINE).

Tissue	Cases Exposure Route	Range	Mean	General Information
10469 Blood, plasma	4 Ingestion	172-315 nmol/ml	192 nmol/ml	Range of peaks 0.75-2 hr after 1000 mg single dose. Mean 1 hr after dosing. Final samples 5-9 nmol/ml at 24 hr (estimated from graph). Fasted before dose. 4 subjects, 2 studied twice at > 2 wk intervals. 21-35 yr old (mean 26 yr), 65-75 kg (mean 69 kg) healthy male volunteers Automatic Amino Acid Analysis
10470 Urine	4 Ingestion	746-961 mg	880 mg	24 hr recovery of 1000 mg single dose. Fasted before dose. 4 subjects, 2 studied twice at > 2 wk intervals. 21-35 yr old (mean 26 yr), 65-75 kg (mean 69 kg) healthy male volunteers Automatic Amino Acid Analysis
BLOOD PLASMA; URINE; DRUGS; DELIBERATE EXPOSURE; PSYCHOTROPIC DRUGS Grove, J.; Allen, R.G.; Schechter, P.J. 1984 Journal of Chromatography Applications 306:383-387				

Gentamicin
1403-66-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
MP 102-108 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10471 Blood, plasma	10 Injection	1.5-0.5 ug/ml	Not applicable	10 min-6 hr, peak (15 ug/ml) at 0.5 hr after 1.7 mg/kg/d for 5 d. Healthy volunteers, 22.9+/-3.9 yr old, wt 75.5+/-6.9 kg RIA
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION Laskin, O.L.; Longstreth, J.A.; Smith, C.R.; Lietman, P.S. 1983 Clinical Parmacology and Therapeutics 34(5):644-650				

Tissue	Cases Exposure Route	Range	Mean	General Information
10472 Blood, serum	12 Injection	a) Not given b) Not given	a) 7.0+/-0.3 ug/ml b) 7.2+/-0.2 ug/ml	a) 80 mg gentamicin b) Same dose plus 1 g aztreonam Maxima after 30 min infusion. Healthy subjects, Caucasian, average age 24 yrs, ht 178 cm, wt 74 kg EMIT
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ANTIBIOTICS; COMPARATIVE EVALUATIONS; DRUG INTERACTION; DRUGS Creasey, W.A.; Adamovics, J.; Dhruv, R.; Plat, T.B.; Sugerman, A.A. 1984 Journal of Clinical Pharmacology 24:174-180				

Gentamicin
1403-66-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
MP 102-106 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10475 Blood, serum	91 Injection	a) 1.1-14.0 mg/l b) <1.0-7.4 mg/l	a) 7.1+/-0.2 mg/l b) 2.5+/-0.1 mg/l S.E.	a) Range of peaks 1 hr after mean dose 5.5+/-0.1 mg/kg/d IV or IM, given twice/d b) Range of trough levels before dose Peak levels correlated with dosage but not trough levels. Potentially toxic trough levels (>2 mg/l) recorded in 57 neonates. Age important factor in trough and steady state levels. Pharmacokinetic data also reported. 1-28 d old babies, United Kingdom Bioassay
BLOOD SERUM; DELIBERATE EXPOSURE; UNITED KINGDOM; NEWBORN; DISEASES; INFECTION; ANTIBIOTICS; DRUGS Mulhall, A.; De Louvois, J.; Hurley, R. 1983 Archives of Disease in Childhood 58:897-900				

Tissue	Cases Exposure Route	Range	Mean	General Information
10474 Blood, serum	10 Dialysis fluid	a) 0-0.5 mg/l b) 0-0.7 m/l c) Not given	a) Not applicable b) Not applicable c) 5 mg/l	a) 0-6 hr, 5 controls, patients without peritonitis b) 0-6 hr, 5 patients with peritonitis c) Steady-state at 21 d, representative peritonitic patient Dose was 15 mg in 2 l dialysis fluid. In all cases, increases over period studied were gradual. Estimated from graph. Patients undergoing continuous ambulatory peritoneal dialysis. Half with peritonitis, half without RIA
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; BELGIUM; KIDNEY DISEASES; INFECTION; DRUGS; ANTIBIOTICS; DRUG THERAPY; BIOACCUMULATION De Paepe, M.; Lameire, N.; Belpaire, F.; Bogaert, M. 1983 Clinical Nephrology 19(2):107-109				

Tissue	Cases Exposure Route	Range	Mean	General Information
10475 Urine	12 Injection	a) Not given b) Not given	a) 68.6+/-5.0% b) 75.4+/-2.6%	a) 80 mg gentamicin b) Same dose plus 1 g aztreonam % of dose excreted in 24 hrs. Healthy subjects, caucasian, average age 24 yrs, ht 178 cm, wt 74 kg EMIT
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ANTIBIOTICS; COMPARATIVE EVALUATIONS; DRUG INTERACTION; DRUGS Creasey, W.A.; Adamovics, J.; Dhruv, R.; Plat, T.B.; Sugerman, A.A. 1984 Journal of Clinical Pharmacology 24:174-180				

Gentamicin
1403-66-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
MP 102-108 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10476 Urine	10 Injection	a) Not given b) Not given c) Not given	a) 67.4+/-18.7 % b) 84.5+/-28.5 % c) 78.1+/-18.9 %	a) Day 1 of administration b) Day 5 of administration c) Day 10 of administration 0-8 hr recovery. Dose 1.7 mg/kg/d. Healthy volunteers, 22.9+/-3.9 yr old, wt 75.5+/-8.9 kg R/A
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION Laskin, O.L.; Longstreth, J.A.; Smith, C.R.; Lietman, P.S. 1983 Clinical Parmacology and Therapeutics 34(5):644-650				

Glucitol, 1,4:3,6-dianhydro-, dinitrate, D- (8 CI); D-Glucitol, 1,4:3,6-dianhydro-, dinitrate (9 CI)
87-33-2
C6-H8-N2-O8
MW 236.14, MP 70 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10477 Blood, plasma	24 Ingestion Sublingual	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 14.0+/-6.1 ng/ml b) 14.0+/-2.8 ng/ml c) 10.6+/-2.3 ng/ml d) 22.4+/-9.9 ng/ml e) 11.7+/-6.2 ng/ml f) 10.9+/-5.3 ng/ml	a) 34.2+/-13.6 min after single 2X5 mg oral dose, tablet b) 2[illegible].5+/-8.7 min after single 10 mg oral dose, tablet c) 35.0+/-9.0 min after single 10 mg oral dose, tablet d) 39.1+/-13.1 min after single 20 mg oral dose, tablet e) 24.4+/-9.0 min after single 10 mg oral dose, solution f) 21.7+/-11.1 min after single 5 mg sublingual dose, tablet Peaks, crossover design, each level a mean of 12 subjects, 1 week between doses. Bioavailability twice as great after sublingual dosing. Healthy volunteers, 18-40 yr, 58-85 kg, activity and diet standardised, fasting Headache GC-EC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; VASODILATORS; NITRATES; DRUGS; COMPARATIVE EVALUATIONS; BIOAVAILABILITY Chasseaud, L.F.; Darragh, A.; Doyle, E.; Lambe, R.F.; Taylor, T. 1984 Journal of Pharmaceutical Sciences 73(5):699-701				

Tissue	Cases Exposure Route	Range	Mean	General Information
10478 Blood, plasma	6 Ingestion	a) 51.6-0.5 ng/ml b) 84.3-0.8 ng/ml c) 112.2-90.8 ng/ml	a) Not applicable b) Not applicable c) Not applicable	a) 15-360 min, peak (51.6 ng/ml) at 15 min b) 2-mononitrate metabolite, 15-360 min, peak (40.5 ng/ml) at 40 min c) 5-mononitrate metabolite, 15-360 min, peak (144.4 ng/ml) at 1 hr Dose 20 mg. Healthy volunteers, 5 males, 1 female, 25-39 yr old GC
BLOOD PLASMA; DELIBERATE EXPOSURE; GERMANY; ADULTS; DRUGS; DRUG THERAPY; BIOACCUMULATION; METABOLISM; METABOLITES Laufen, H.; Aumann, M.; Leitold, M. 1983 Arzneimittel-Forschung/Drug Research 33(11):980-984				

Glucitol, 1,4:3,6-dianhydro-, dinitrate, D- (8 CI); D-Glucitol, 1,4:3,6-dianhydro-, dinitrate (9 CI)
87-33-2
C6-H8-N2-O8
MW 236.14, MP 70 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10479 Blood, plasma	a) 11 b) 6 c) 7 d) 7 Injection Ingestion Dermal	a) 25-2.5 ng/ml b) 3.5-1.0 ng/ml c) 1.0-3.0 ng/ml d) 2.0-25 ng/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 15 min-1.0 hr, peak (25 ng/ml) at 15 min after 2.0 mg infusion b) 5 min-3 hr, peak (20 ng/ml) at 15 min after 5 mg sublingual c) 5 min-30 hr, peak (6 ng/ml) between 6 and 24 hr after 100 mg/400 sq cm dermal d) 5-mononitrate metabolite, 5 min-30 hr, peak (25 ng/ml) between 18 and 30 hr after 100 mg/400 sq cm dermal. Patients with coronary artery disease, 9 males, 2 females, 32-77 yr old GC-EC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; CARDIOVASCULAR DISEASES; ANALGESICS; DRUG THERAPY; DRUGS; BIOACCUMULATION; METABOLITES Morrison, R.A.; Wiegand, U.-W.; Jahnchen, E.; Hohmann, D.; Bechtold, H.; Meinertz, T.; Pung, H.-L. 1983 Clinical Pharmacology and Therapeutics 33(6):747-756				

Tissue	Cases Exposure Route	Range	Mean	General Information
10480 Blood, plasma	1 Ingestion	a) 6-1 ng/ml b) 25-3 ng/ml	a) Not applicable b) Not applicable	a) 2-isosorbide mononitrate metabolite, 0.25-24 hr, peak (10 ng/ml) 0.5 hr after 5 mg b) 5-isosorbide mononitrate metabolite, peak (45 ng/ml) 0.5 hr after 5 mg New assay. Healthy volunteer GC/EC
10481 Urine	1 Ingestion	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 11.1% b) 2.2% c) 0.41% d) 0.31%	a) Conjugated 5-isosorbide mononitrate metabolite b) Free form c) Conjugated 2-isosorbide mononitrate metabolite d) Free form % recovery in 104 hr of 5 mg. Healthy volunteer GC/EC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; CARDIOVASCULAR DISEASES; DRUGS; DRUG THERAPY; VASODILATORS; MEASUREMENT METHODS; BIOACCUMULATION; METABOLITES Sioufi, A.; Pommier, F. 1984 Journal of Chromatography 305:95-108				

Glucitol, 1,4:3,6-dianhydro-, 5-nitrate, D- (8 CI); D-Glucitol, 1,4:3,6-dianhydro-, 5-nitrate (9 CI)
16051-77-7
C6-H9-N-O6

Tissue	Cases Exposure Route	Range	Mean	General Information
10462 Blood, plasma	12 Ingestion Injection	a) 851+/-41-10+/-4 ng/ml b) 346+/-87-9+/-5 ng/ml	a) Not given b) Not given	a) At 2.5 hr during IV 20 mg infusion and 24 hr, 40+/-14 ng/ml at 0.25 hr during infusion b) At 1 hr and 24 hr, with 188+/-161 ng/ml at 0.25 hr Ranges of means. Healthy adults, 19-43 yr, 59-80 kg, fasting 12 hr before dose Headache
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; DRUG THERAPY; BIOAVAILABILITY; VASODILATORS Major, R.M.; Taylor, T.; Chasseaud, L.F.; Darragh, A.; Lambe, R.F. 1984 Clinical Pharmacology and Therapeutics 35(5):653-659				

Tissue	Cases Exposure Route	Range	Mean	General Information
10488 Blood, plasma	7 Injection Ingestion	a) 156-18 ng/ml b) 541-180 ng/ml c) 350-100 ng/ml d) 196-70 ng/ml	a) Not given b) Not given c) Not given d) Not given	a) 0.05-12 hr, 87 ng/ml at 0.75 hr, 5 mg IV b) 0.5-6 hr, 20 mg oral c) 0.5-6 hr, 15 mg oral d) 0.5-6 hr, 10 mg oral Ranges of means, estimated from graph. Healthy adults, 26-41 yr, 54-71 kg GC-EC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; NITRATES; METABOLITES; BIOAVAILABILITY Strachl, P.; Galeazzi, R.L.; Soliva, M. 1984 Clinical Pharmacology and Therapeutics 36(4):488-492				

Tissue	Cases Exposure Route	Range	Mean	General Information
10484 Blood, plasma	8 Ingestion	203.2-14.2 ng/ml	Not applicable	0.17-6 hr, peak (483.2 ng/ml) at 1 hr after 20 mg. Healthy volunteers, 4 males, 4 females, 20-45 yr old GC
BLOOD PLASMA; DELIBERATE EXPOSURE; GERMANY; ADULTS; DRUGS; DRUG THERAPY; BIOACCUMULATION; METABOLISM; METABOLITES Laufen, H.; Aumann, M.; Leitold, M. 1983 Arzneimittel-Forschung/Drug Research 33(11):980-984				

Gluconic acid, D-, compd. with quinidine (1:1) (8 CI); D-Gluconic acid, compd. with (9S)-6'-methoxycinchonan-9-ol (1:1) (9 CI)
7054-25-3
C20-H24-N2-O2.C6-H12-O7
MW 520.60, MP 175-176.5 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10485 Blood, plasma	7	5.7-10.2 umol/l	8.4+/-1.8 umol/l	Predose levels. Dosage not given. Ranges of means. Cardiac patients receiving digoxin-quinidine therapy
BLOOD PLASMA; DELIBERATE EXPOSURE; HEART DISEASES; ANTIARRHYTHMIC AGENTS; DRUG THERAPY; DRUGS; METABOLISM Pedersen, K.E.; Christiansen, B.D.; Klitgaard, N.A.; Nielsen-Kudsk, F. 1983 Acta Pharmacologica et Toxicologica 52:357-363				

Glutamic acid, N-(p-(((2-amino-5-formul-5,6,7,8-tetrahydro-4-hydroxy-6-pteridinyl)methyl)amino) bensoyl)-, calcium salt (1:1), L- (8 CI); L-glutamic acid, N-(4-(((2-amino-5-formyl-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyl)methyl)amino)b ensoyl)-, calcium salt (1:1) (9 CI)
1492-18-8
C20-H23-N7-O7.Ca

Tissue	Cases Exposure Route	Range	Mean	General Information
10486 Blood, plasma	18 Injection Ingestion	a) 33.1-194.0 uM b) <0.98 uM	a) 111.3+/-40.3 uM b) <0.98 uM	a) 500 mg/sq m, 2 hr IV infusion, 10 cases b) 500 or 1000 mg/sq m oral dose, 8 cases Peak in a) occurred within minutes of onset of infusion. Detection limits were 0.98 uM. 300, 600, or 750 mg/sq m 5-fluorouracil given by rapid IV injection in the middle of the infusion. In a), peak 5,10-CH2FH4 was 1.8-22.6 uM (mean 11.0 uM). In b), peak 5,10-CH2FH4 was 2.4-3.6 uM at 40-180 min. Combined dosage may enhance antitumor activity of 5-fluorouracil. 26 patients had combined therapy. Patients, 19-71 yr, with metastatic colorectal carcinoma, 12 had prior chemotherapy Diarrhea, watering eyes with mild conjunctivitis, macular rash, thinning of nails, hair loss Leukopenia HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; DRUG INTERACTION; ANTITUMOR AGENTS; METABOLISM; CYTOTOXICITY; BIOAVAILABILITY; NEOPLASMS Madajewicz, S.; Petrelli, N.; Rustum, Y.M.; Campbell, J.; Herrera, L.; Mittelman, A.; Perry, A.; Creaven, P.J. 1984 Cancer Research 44:4667-4669				

Glutamic acid, N-(p-(((2-amino-5-formyl-5,6,7,8-tetrahydro-4-hydroxy-6-pteridinyl)methyl)amino) bensoyl)-, L- (8 CI); L-Glutamic acid, N-(4-(((2-amino-5-formyl-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyl)methyl)amino)b ensoyl)- (9 CI)
58-05-9
C20-H23-N7-O7
MW 473.44

Tissue	Cases Exposure Route	Range	Mean	General Information
10487 Blood, plasma	12 Injection Ingestion	a) 4000-1600 ng/ml b) 1000-12 ng/ml c) 460-190 ng/ml d) 275-300 ng/ml e) 200-300 ng/ml	a) Not given b) Not given c) Not given d) Not given e) Not given	a) d-isomer, 1 and 10 hr after single 50 mg IV dose b) l-isomer, 1 and 4 hr. Same dose c) Metabolite, 5-methyltetrahydrofotate, 1 and 10 hr. Same dose d) d-isomer, 24 and 72 hr after start of 24 mg orally every 8 hr for 9 doses. 24 hr level is prior to 4th dose. Last dose at 64 hr. Peak 720 ng/ml at 66 hr 6 cases e) Metabolite, 5-methyltetrahydrofolate 24 and 72 hr after same doses as d). Peak 520 ng/ml at 66 hr. Same cases as d). 23-38 yr old healthy subjects HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS Straw, J.A.; Szapary, D.; Wynn, W.T. 1984 Cancer Research 44:3114-3119				

Glutamic acid, N-(p-(((2,4-diamino-6-pteridinyl)methyl)methylamino)benzoyl)-, L-(+)- (8 CI); L-Glutamic acid, N-(4-(((2,4-diamino-6-pteridinyl)methyl)methylamino)benzoyl)- (9 CI)
59-05-2
C20-H22-N8-O5
MW 454.44, MP 186 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10488 Blood, plasma	9 Injection	a) 2.94+/-0.22X10(E-6)M-6.46+/-0.66X10(E-9)M b) 3.67+/-0.25X10(E-6)M-4.25+/-0.36X10(E-9)M c) 2.04+/-0.26X10(E-6)M-1.96+/-0.35X10(E-8)M d) 1.75+/-0.11X10(E-6)M-1.55+/-0.16X10(E-8)M	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) Group I, IV b) Group I, IM c) Group II, IV d) Group II, IM 1 and 48 hr after dose. Group I: 1 mg/kg methotrexate on d 1, 3, 5 & 7. 0.1 mg/kg citrovorum factor on d 2, 4, 6 & 8. 5 cases. Group II: 0.5 mg/kg/d methotrexate for 5 d 4 cases. Cycles repeated every 3 wk until B-HCG negative or plateau. Cycles alternated IV & IM. Significant differences a) & b)-1 hr ($p<0.009$) and 48 hr ($p<0.05$). Gestational trophoblastic neoplasia patients admitted to the John Hopkins Hospital, 5/81-12/82 Stomatitis RIA
BLOOD PLASMA; DELIBERATE EXPOSURE; MARYLAND; NEOPLASMS; CHEMOTHERAPY; ANTITUMOR AGENTS Rotmensch, J.; Rosenshein, N.; Donehower, R.; Dilloh, M.; Villar, J. 1984 American Journal of Obstetrics and Gynecology 148(6):730-734				

Tissue	Cases Exposure Route	Range	Mean	General Information
10489 Blood, plasma	15 Injection	0.6-9 uM	Not given	24 hr after 12 hr IV, 1500 mg/sq m on day 14 of chemotherapy 28-74 yr olds with lymphoma Competitive binding assay
ADULTS; NEOPLASMS; BLOOD PLASMA; ANTITUMOR AGENTS; CHEMOTHERAPY Kerr, I.G.; Jolivet, J.; Collins, J.M.; Drake, J.C.; Chabner, B.A. 1983 Clinical Pharmacology and Therapeutics 33(1):44-51				

Tissue	Cases Exposure Route	Range	Mean	General Information
10490 Blood, plasma	92 Injection	a) 3.5X10(E-6)-4.1X10(E-6) mol/l b) 3.7X10(E-5)-2.4X10(E-5) mol/l c) Not given d) Not given e) 1.3X10(E-5)-1.6X10(E-5) mol/l f) 7X10(E-7)-6.8X10(E-6) mol/l	a) Not given b) Not given c) 1.9X10(E-7) mol/l d) 6.2X10(E-8) mol/l e) Not given f) Not given Medians	a) 12 and 24 hr after start of 24 hr infusion of 150 mg/sq m, 17 cases, b) 12 and 24 hr after start 24 hr infusion of 500 mg/sq m, 51 cases c) 48 hr d) 72 hr e) 12+/-24 hr after start of 24 hr infusion of 700 mg/sq m. Medulloblastoma patients, 6 cases f) At end of 500 mg/sq m 24 hr infusion. Leukemia patients in relapse, 18 cases a-d) leukemia patients in remission. b)-f) also given 50 mg/sq m methotrexate before dose. All given leucovorin 2-24 hr after dose. Children with acute lymphocytic leukemia or medulloblastoma Some had one or more of thrombocytopenia, leukopenia, stomatitis, mouth ulcers, skin changes and a rise in liver enzymes RIA
BLOOD PLASMA; CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; CHILDREN; LEUKEMIA; ANTITUMOR AGENTS; DRUGS; DRUG THERAPY; NEOPLASMS Janka, G.E.; Mack, R.; Helmig, M.; Haas, R.J.; Bidlingmaier, F. 1984 Oncology 41:226-232				

Glutamic acid, N-(p-(((2,4-diamino-6-pteridinyl)methyl)methylamino)benzoyl)-, L-(+)- (8 CI); L-Glutamic acid, N-(4-(((2,4-diamino-6-pteridinyl)methyl)methylamino)benzoyl)- (9 CI)
59-05-2
C20-H22-N8-O5
MW 454.46, MP 185 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10491 Blood, serum	15 Ingestion	a) 0.31-0.83 uM b) 0.27-1.10 uM	a) Not given b) Not given	a) Peaks, after 6.3-10.1 mg/sq m, 1.5 hr b) Peaks, after 18.3-28.1 mg/sq m, 2.5 hr Maintenance doses. Significant individual variations. 4-14 yr olds with acute lymphoblastic leukemia in remission 2-36 mo. Myelosuppression, hepatotoxicity Chem
CHILDREN; LEUKEMIA; BLOOD SERUM; URINE; DRUG THERAPY; DRUGS; CHEMOTHERAPY; NEOPLASMS; DELIBERATE EXPOSURE Balis, F.M.; Savitch, J.L.; Bleyer, W.A. 1983 Cancer Research 43:2342-2345				

Tissue	Cases Exposure Route	Range	Mean	General Information
10492 Blood, serum	a) 6 b) 6 Injection	a) 0.006-0.020 umol b) 0.010-0.051 umol	a) 0.012+/-0.006 umol b) 0.024+/-0.014 umol	a) 24 hr after 10 mg IV dose b) 24 hr after 10 mg intramuscular dose Rapid and complete absorption following IM injection. Both routes produced levels above suggested critical level of 0.01 umol. Patients, 10 with rheumatoid arthritis, 2 with psoriatic arthritis RIA
BLOOD SERUM; DELIBERATE EXPOSURE; CANADA; ADULTS; RHEUMATOID ARTHRITIS; DRUG THERAPY; BIOACCUMULATION; DRUGS Edelman, J.; Bigge, D.F.; Jamail, F.; Russell, A.S. 1984 Clinical Pharmacology and Therapeutics 35(3):382-386				

Tissue	Cases Exposure Route	Range	Mean	General Information
10493 Blood, serum	29 Injection	a) 5.4-33.7 uM b) Not given	a) 15.8+/-7.5 uM b) 15.2+/-5.0 uM	a) Steady-state at 24 hrs after 200 mg/sq m bolus and 24 hr infusion of 800 mg/sq m b) Steady-state at 24 hrs after 200 mg/sq m bolus, and 12 mg/sq m intrathecal and 24 hr infusion of 800 mg/sq m. Leukemic patients, 5.7+/-3.0 yr old, wt 22.5+/-11.7 kg HPLC; Enzyme immunoassay
BLOOD SERUM; CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; CHILDREN; LEUKEMIA; ANTITUMOR AGENTS; DRUGS; DRUG THERAPY; BIOACCUMULATION; NEOPLASMS Evans, W.E.; Hutson, P.R.; Stewart, C.F.; Cairnes, D.A.; Bowman, W.P.; Rivera, G.; Crom, W.R. 1983 Clinical Pharmacology and Therapeutics 33(3):301-307				

Glutamic acid, N-(p-(((2,4-diamino-6-pteridinyl)methyl)methylamino)benzoyl)-, L-(+)- (8 CI); L-Glutamic acid, N-(4-(((2,4-diamino-6-pteridinyl)methyl)methylamino)benzoyl)- (9 CI)
59-05-2
C20-H22-N8-O5
MW 454.46, MP 185 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10494 Cerebrospinal fluid	1 Injection	6.7X10(E-2)-7.7X10(E-5)M	Not applicable	40 min to 4 hr after patient given intrathecal overdose of 625 mg. Treatment by lumbar puncture removed 540 mg within 40 min, and ventriculolumbar perfusion with normal saline and 0.02 ug/ml leucovorin for 4 hr removed an additional 56 mg. Level on d 4 was 2.2X10(E-6)M. 26 yr old being treated for lymphoma, accidently overdosed. 4 mo after incident patient had no residual neurologic abnormalities
CEREBROSPINAL FLUID; ADULTS; CARCINOMAS; ANTITUMOR AGENTS; DRUG THERAPY; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS; DELIBERATE EXPOSURE Spiegel, R.J.; Cooper, P.R.; Blum, R.H.; Speyer, J.L.; McBride, D.; Mangiardi, J. 1984 New England Journal of Medicine 311(6):386-388				

Tissue	Cases Exposure Route	Range	Mean	General Information
10495 Cerebrospinal fluid	87 Injection	Not given	4.2X10(E-7) mol/l Median	At the end of a 24 hr 500 mg/sq m infusion. 50 mg/sq m was given before dose. Children with acute lymphocytic leukemia in remission RIA
BLOOD PLASMA; CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; CHILDREN; LEUKEMIA; ANTITUMOR AGENTS; DRUGS; DRUG THERAPY; NEOPLASMS Janka, G.E.; Mack, R.; Helmig, M.; Haas, R.J.; Bidlingmaier, F. 1984 Oncology 41:225-232				

Tissue	Cases Exposure Route	Range	Mean	General Information
10496 Cerebrospinal fluid	29 Injection	a) Not given b) Not given	a) 0.27+/-0.1 uM b) 1.14+/-0.47 uM	a) Steady-state at 24 hrs after 200 mg/sq m bolus and 24 hr infusion of 800 mg/sq m b) Steady-state at 24 hrs after 200 mg/sq m bolus, and 12 mg/sq m intrathecal and 24 hr infusion of 800 mg/sq m. Leukemic patients, 5.7+/-3.0 yr old, wt 22.8+/-11.7 kg HPLC; Enzyme immunoassay
BLOOD SERUM; CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; CHILDREN; LEUKEMIA; ANTITUMOR AGENTS; DRUGS; DRUG THERAPY; BIOACCUMULATION; NEOPLASMS Evans, W.E.; Hutson, P.R.; Stewart, C.F.; Cairnes, D.A.; Bowman, W.P.; Rivera, G.; Crom, W.R. 1985 Clinical Pharmacology and Therapeutics 38(3):301-307				

Glutamic acid, N-(p-(((2,4-diamino-6-pteridinyl)methyl)methylamino)benzoyl)-, L-(+)- (8 CI); L-Glutamic acid, N-(4-(((2,4-diamino-6-pteridinyl)methyl)methylamino)benzoyl)- (9 CI)

59-05-2
C20-H22-N8-O5
MW 454.46, MP 185 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10497 Urine	15 Injection Ingestion	a) 0.43-0.73% b) 0.17-0.80% c) 0.70-0.87% d) 0.73-0.96%	a) Not given b) Not given c) Not given d) Not given	a) <12 mg/sq m, oral b) >12 mg/sq m, oral c) <12 mg/sq m, IV d) >12 mg/sq m, IV % of dose. 24 hr excretions 4-14 yr olds with acute lymphoblastic leukemia, in remission 2-36 mo. Myelosuppression, hepatotoxicity Chem
CHILDREN; LEUKEMIA; BLOOD SERUM; URINE; DRUG THERAPY; DRUGS; CHEMOTHERAPY; NEOPLASMS; DELIBERATE EXPOSURE Balis, F.M.; Savitch, J.L.; Bleyer, W.A. 1983 Cancer Research 43:2842-2845				

Glutarimide, 2-(p-aminophenyl)-2-ethyl- (8 CI); 2,6-Piperidinedione, 3-(4-aminophenyl)-3-ethyl (9 CI)

125-84-8
C13-H16-N2-O2
MW 232.27, MP 149-150 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10498 Blood, plasma	1 Ingestion	18-2.5 ug/ml	Not given	2-48 hr after 500 mg dose. Acetylamino-glutethimide metabolite also measured in plasma, 5-1 ug/ml at 3 and 48 hr, and saliva, 3.5-0.6 ug/ml at 3 and 48 hr. Ranges and times estimated from graph. Patient with carcinoma of the breast GC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; MEASUREMENT METHODS; NEOPLASMS Adam, A.M.; Rogers, H.J. 1984 Journal of Chromatography 307:129-135				

Glutarimide, 2-ethyl-2-phenyl- (8 CI); 2,6-Piperidinedione, 3-ethyl-3-phenyl- (9 CI)

77-21-4
C13-H15-N-O2
MW 217.26, MP dl form 84 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10499 Blood	a) 4 b) 3 Ingestion	a) 1.1-2.6 mg/dL b) 2.9-6.0 mg/dL	a) Not given b) Not given	a) Attempted suicides, at admission b) Fatal suicides, postmortem No other drugs involved. 20-24 yr olds, 1/75-5/83, University of California Medical Center, San Diego Coma, hallucinations, respiratory depression, tachycardia, ataxia, speech and visual disturbances in some GLC; Spectrophotometry
BLOOD; DELIBERATE EXPOSURE; ADULTS; SUICIDE; DRUG ABUSE; DRUGS; HYPNOTICS; SEDATIVES; FORENSIC MEDICINE Bailey, D.N.; Shaw, R.F. 1983 Journal of Toxicology-Clinical Toxicology 20(2):135-145				

Glutarimide, 2-ethyl-2-phenyl- (8 CI); 2,6-Piperidinedione, 3-ethyl-3-phenyl- (9 CI)
77-21-4
C13-H15-N-O2
MW 217.26, MP dl form 84 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10600 Blood	a) 11 b) 1 c) 9 d) 2	a) 7.3-56 mg/l b) Not applicable c) 7.3-56 mg/l d) 7.3-12 mg/l	a) 33.3 mg/l b) 9.0 mg/l c) 38.6 mg/l d) 9.6 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related death, 1975-1980 c) Single-drug deaths, without ethanol, 1975-1980 d) Single-drug deaths, with ethanol, 1975-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooke, C.R. 1985 Journal of Analytical Toxicology 7:225-230				

Glycine, N-((6-methoxy-5-(trifluoromethyl)-1-naphthalenyl)thioxomethyl)-N-methyl-
82964-04-3
C16-H14-F3-N-O2-S

Tissue	Cases Exposure Route	Range	Mean	General Information
10501 Blood, plasma	a) 3 b) 4 c) 40 d) 6 e) 6 Ingestion	a) Not given b) Not given c) 0.5-112.5 ug/ml d) Not given e) Not given	a) 7.40+/-0.87 ug/ml b) 5.34+/-0.94 ug/ml c) Not given d) 3.3+/-0.3 ug/ml e) 14.2+/-2.2 ug/ml S.E.	a) Normal subjects, 100 mg C-14 labelled, measured 48 hr b) Diabetics, 100 mg C-14 labelled, measured 48 hr c) Range of means from normal subjects given 10-1200 mg, measured 36 hr d) Normal subjects 25 mg 2X/d for 1 wk and 50 mg 2X/d for 2nd wk, measured on d 14 e) Normal subjects 100 mg 2X/d for 1 wk and 200 ug 2X/d for 2nd wk, measured on d 14. Peaks. 23.4-33.8 yr old, 46.6-78.6 kg, 170-179 cm normal and diabetic (insulin-dependent) males. PL and MO HPLC; Radiometry
10502 Urine	7 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 59.3+/-3.0% b) 68.7+/-1.5% c) 53.2+/-3.6% d) 65.0+/-4.1% S.E.	a) 3 normal subjects, 24 hr excretion b) 7 d excretion c) 4 diabetics, 24 hr excretion d) 7 d excretion Percent original 100 mg C-14-labelled dose. Healthy 29.7 yr old, 65.5 kg, 172 cm (means) males. Insulin-dependent 30.5 yr old, 73.4 kg, 176 cm (means) males. PL Radiometry
DELIBERATE EXPOSURE; DRUGS; DRUG THERAPY; DIABETES; METABOLISM; RADIOISOTOPES; URINE; BLOOD PLASMA Hicks, D.R.; Kraml, M.; Cayen, M.N.; Dubuc, J.; Ryder, S.; Dvornik, D. 1984 Clinical Pharmacology and Therapeutics 36(4):493-499				

Guanidine, N-cyano-N'-methyl-N"-(2-(((5-methyl-1H-imidasol-4-yl)methyl)thio)ethyl)-
51481-61-9
C10-H16-N6-S
MW 252.38

Tissue	Cases Exposure Route	Range	Mean	General Information
10505 Blood, plasma	9 Ingestion	1.25+/-0.30-2.05+/-0.44 ug/ml S.E.	Not given	During treatment with 300 mg/6 hr, at 12 and 36 hr after first dose Range of means. Temazepam given concurrently, 12 hr after first dose. Healthy 21-67 yr old volunteers GC
BLOOD PLASMA; DELIBERATE EXPOSURE; HYPNOTICS; DRUGS; DRUG INTERACTION				
Greenblatt, D.J.; Abernethy, D.R.; Divoll, M.; Locniskar, A.; Harmatz, J.S.; Shader, R.I. 1984 Journal of Pharmaceutical Sciences 73(3):399-401				

Tissue	Cases Exposure Route	Range	Mean	General Information
10504 Blood, plasma	10 Ingestion	1.16+/-0.18-1.17+/-0.29 ug/ml	Not given	Range of means during first and second wk of 1200 mg/d dosage Given during 2 weeks of 6 wk crossover study to determine consequences of coadministration during clinical use of diazepam. 24-49 yr olds using diazepam 7 mo-15 yr HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; BEHAVIOR DISORDERS; DRUGS; DRUG INTERACTION; TRANQUILIZERS; METABOLISM				
Greenblatt, D.J.; Abernethy, D.R.; Morse, D.S.; Harmatz, J.S.; Shader, R.I. 1984 New England Journal of Medicine 310(25):1639-1643				

Tissue	Cases Exposure Route	Range	Mean	General Information
10505 Blood, plasma	8 Ingestion	a) Not given b) Not given c) Not given	a) 0.99+/-0.13 ug/ml b) 1.76+/-0.45 ug/ml c) Trace	a) 4 hr after 300 mg, steady state b) 4 hr after 600 mg, steady state c) 9-10 hr after 400 mg Drug decreased phenytoin clearance. Healthy subjects, 20-36 yr HPLC
BLOOD PLASMA; DRUGS; ANTICONVULSANTS; DRUG INTERACTION; DELIBERATE EXPOSURE; ADULTS; BIOACCUMULATION				
Bartle, W.R.; Walker, S.E.; Shapero, T. 1983 Clinical Pharmacology and Therapeutics 33(5):649-655				

Tissue	Cases Exposure Route	Range	Mean	General Information
10506 Blood, plasma	8 Ingestion	0.8-1.5 ug/ml	1.2+/-0.10 S.E.	Range of means, dose 384-1020 mg/d theophylline plus 300 mg/6 hr or 400 mg/8 hr cimetidine for 7 d for chronic pulmonary disease. 56-78 yr old male patients, wt 57.2-90.7 kg HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; PULMONARY DISEASES; DRUGS; DRUG THERAPY; DRUG INTERACTION; THEOPHYLLINES				
Vestal, R.E.; Thummel, K.E.; Musser, B. 1983 British Journal of Clinical Pharmacology 15:411-418				

Guanidine, N-cyano-N'-methyl-N"-(2-(((5-methyl-1H-imidazol-4-yl)methyl)thio)ethyl)-
51481-61-9
C10-H16-N6-S
MW 252.35

Tissue	Cases Exposure Route	Range	Mean	General Information
10607 Blood, plasma	7 Ingestion	a) 2.1-0.0 mg/l b) 0.7-0.0 mg/l c) <0.02 mg/l	a) Not given b) Not given c) Not given	a) 1 and 48 hr after 400 mg. Peak 2.2 ng/l at 2 hr b) 1 and 48 hr after 400 mg. 5 min later. 20 ml ipecac. Vomited 10-25 min later c) 1-24 hr after 400 mg, 5 min later, 50 g activated charcoal in 400 ml water 20 mg metoclopramide (antiemetic) 1 hr before doses. Estimated from graph. 19-29 yr old student volunteers HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; DRUGS; COMPARATIVE EVALUATIONS Neuvonen, P.J.; Olkkola, K.T. 1984 Clinical Toxicology 22(2):103-114				

Tissue	Cases Exposure Route	Range	Mean	General Information
10606 Blood, plasma	22 Ingestion Injection	a) 0.05-0.10 ug/ml b) 0.05-0.20 ug/ml c) 12-0.05 ug/ml d) 15-0.07 ug/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) Controls, 0.5-12 hr, peak (0.7 ug/ml) 1 hr after 200 mg oral b) Patients with ascites and cirrhosis, 0.5-12 hr, peak (1 ug/ml) 2.5 hr after 200 mg oral c) Controls, 0.25-12 hr, peak (12 ug/ml) immediately after 200 mg IV d) Patients with ascites and cirrhosis, 0.25-12 hr, peak (15 ug/ml) immediately after 200 mg IV Data estimated from graph. Patient volunteers, 21-78 yr old, wt 42-93 kg, 9 males, 13 females HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; LIVER DISEASES; GASTROINTESTINAL DISEASES; ANTACIDS; DRUGS; DRUG THERAPY; BIOACCUMULATION Albin, H.; Cousigou, P.; Vincon, G.; Pehourcq, F.; Fleury, B.; Beraud, C. 1983 Gastroenterology and Clinical Biology 7:251-25				

Tissue	Cases Exposure Route	Range	Mean	General Information
10609 Blood, serum	a) 4 b) 2 c) 1 Injection	a) 1.75-10.0 mg/l b) 4.4-0.4 mg/l c) Not applicable	a) 3.7+/-4.21 mg/l b) 2.4+/-2.0 mg/l c) 0.56 mg/l	a) Patients with renal and liver disease b) Patients with liver disease c) Patients with renal disease Autopsy samples. 22-74 yr old patients HPLC
BLOOD SERUM; CEREBROSPINAL FLUID; BRAIN; DELIBERATE EXPOSURE; ADULTS; LIVER DISEASES; KIDNEY DISEASES; AUTOPSIES; DRUG THERAPY; FORENSIC MEDICINE; BIOACCUMULATION; DRUGS Berg, M.J.; Lantz, R.K.; Schentag, J.J.; Vera, B.A. 1984 Journal of Forensic Sciences 29(1):147-154				

Guanidine, N-cyano-N'-methyl-N"-(2-(((5-methyl-1H-imidazol-4-yl)methyl)thio)ethyl)-
51481-61-9
C10-H16-N6-S
MW 252.34

Tissue	Cases Exposure Route	Range	Mean	General Information
10610 Blood, serum	a) 6 b) 6 c) 6 Injection	a) 7-0.3 mcq/ml b) 0.4-0.1 mcq/ml c) 5-0.3 mcq/ml	a) Not applicable b) Not applicable c) Not applicable	a) 0.25-8 hr, peak (7 mcq/ml), end of infusion, cirrhotic patients b) Sulfoxide metabolite, 0.25-8 hr, peak (0.4 mcq/ml), end of infusion, cirrhotic patients c) 0.25-8 hr, peak (5 mcq/ml), end of infusion, cirrhotic patients with portal system encephalopathy Dose 300 mg. 40% decrease in total clearance of patients with portal system encephalopathy. Recommend dosage decrease to avoid CNS side effects. Cirrhotic patients, half with portal systemic encephalopathy, 7 males, 9 females, 55+/-14.5 yr old HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; LIVER DISEASES; GASTROINTESTINAL DISEASES; DRUGS; DRUG THERAPY; BIOACCUMULATION; METABOLITES Ziemniak, J.A.; Bernhard, H.; Schentag, J.J. 1983 Clinical Pharmacology and Therapeutics 34(3):375-382				

Tissue	Cases Exposure Route	Range	Mean	General Information
10611 Brain	1 Injection	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable i) Not applicable	a) 2.73 ug/g b) 0.86 ug/g c) 0.91 ug/g d) 2.21 ug/g e) 1.66 ug/g f) 0.71 ug/g g) 2.78 ug/g h) 4.20 ug/g i) 1.06 ug/g	a) Basal ganglia b) Cerebellum c) Cortex (cerebral) d) Cortex (motor) e) Cortex (visual) f) Hippocampus g) Hypothalamus h) Medulla i) Pons Autopsy samples from patient with renal and liver disease. 66 yr old patient HPLC
10612 Cerebrospinal fluid	a) 4 b) 1 Injection	a) 0.25-4.5 mg/l b) Not applicable	a) 1.48 mg/l b) 1.9 mg/l	a) Patients with renal and liver disease b) Patient with liver disease Autopsy samples. 22-74 yr old patients HPLC
BLOOD SERUM; CEREBROSPINAL FLUID; BRAIN; DELIBERATE EXPOSURE; ADULTS; LIVER DISEASES; KIDNEY DISEASES; AUTOPSIES; DRUG THERAPY; FORENSIC MEDICINE; BIOACCUMULATION; DRUGS Berg, M.J.; Lantz, R.K.; Schentag, J.J.; Vera, B.A. 1984 Journal of Forensic Sciences 29(1):147-154				

Guanidine, N-cyano-N'-methyl-N"-(2-(((5-methyl-1H-imidazol-4-yl)methyl)thio)ethyl)-
51481-61-9
C10-H16-N6-S
MW 252.38

Tissue	Cases Exposure Route	Range	Mean	General Information
10518 Dialysis fluid	6 Injection	1.1-4.3%	2.2+/-1.4%	% recovery of 300 mg IV in 24 hr. Patients undergoing continuous ambulatory peritoneal dialysis. Patients with renal insufficiency, 53-75 yr old HPLC
DIALYSIS FLUID; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; GASTROINTESTINAL DISEASES; DRUGS; DRUG THERAPY; ANTACIDS; BIOACCUMULATION				
Kegan, F.J.; Sampliner, R.E.; Mayersohn, M.; Kazama, R.M.; Perrier, D.; Jones, W.; Michael, U.F. 1983 Journal of Clinical Pharmacology 23:252-256				

Tissue	Cases Exposure Route	Range	Mean	General Information
10514 Urine	7 Ingestion	a) Not given b) Not given c) Not given	a) 157.6+/-16.1 mg b) 89.7+/-12.0 mg c) 1.3+/-0.4 mg	a) Total for 48 hr after 400 mg b) Total for 48 hr after 400 mg, 5 min later, 20 ml ipecac. Vomited 10-25 min later c) Total for 48 hr after 400 mg, 5 min later, 50 g activated charcoal in 400 ml water 20 mg metoclopramide (antiemetic) 1 hr before doses. 19-29 yr old student volunteers HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; DRUGS; COMPARATIVE EVALUATIONS				
Neuvonen, P.J.; Olkkola, K.T. 1984 Clinical Toxicology 22(2):103-114				

Heparin
9005-49-6
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
MW 6000-30,000

Tissue	Cases Exposure Route	Range	Mean	General Information
10515 Blood, plasma	18 Injection	a) Undetectable b) 0.15-0.28 IU/ml c) 0.21-0.47 IU/ml d) 0.6-0.75 IU/ml	a) Not given b) Not given c) Not given d) Not given	a) 1-5 hr after 5000 IU, SC 1 hr before dialysis b) 1-5 hr after 10000 IU, SC 1 hr before dialysis. Peak 2 hr c) 1-5 hr after loading dose of 2500 IU as bolus, then continous infusion of 1000 IU/hr until 30 min before end of dialysis. Peak 1 hr d) 1-5 hr after loading dose of 5000 IU as bolus, then infusion of 1500 IU/hr until 30 min before end of dialysis. Peak 2 & 5 hr Uneventful dialysis only achieved in d), in which mean levels were always >0.5 IU/ml. Additional data suggest that this level directly suppresses FPA and B-thromboglobulin, and is most important during prolonged dialysis. Ranges of means. Some values estimated from figures. 36-71 yr old dialysis patients, Charing Cross Hospital, London, UK Immunoassay
BLOOD PLASMA; DELIBERATE EXPOSURE; UNITED KINGDOM; KIDNEY DISEASES; ANTICOAGULANTS; DRUGS; HEMODIALYSIS				
Ireland, H.; Lane, D.A.; Curtis, J.R. 1984 Journal of Laboratory and Clinical Medicine 103(4):643-652				

Hexanoic acid, 6-amino-
60-32-2
C6-H13-N-O2
MW 131.18, MP 202-203 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10516 Blood, plasma	6 Injection	600-10 ug/ml	Not applicable	0.5-12 hrs, peak (600 ug/ml) at 0.5 hr after 10 g infusion. Healthy volunteers HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; CARDIOVASCULAR DISEASES; ANTICOAGULANTS; DRUGS; BIOACCUMULATION Frederiksen, M.C.; Bowsher, D.J.; Ruo, T.I.; Henthorn, T.K.; Te'ao, C.-H.; Green, D.; Atkinson, A.J., Jr. 1984 Clinical Pharmacology and Therapeutics 35(3):387-393				

Hippuric acid, o-hydroxy- (8 CI); Glycine, N-(2-hydroxybenzoyl)- (9 CI)
487-54-7
C9-H9-N-O4

Tissue	Cases Exposure Route	Range	Mean	General Information
10517 Urine	12 Ingestion	a) Not applicable b) Not applicable c) Not applicable	a) 214 mg b) 206 mg c) 221 mg	a) Na+ solution dosage form b) K+ solution c) Tablet Accumulation in 10 h Amount aspirin given 324, 324 and 325 mg, respectively. Healthy volunteers, 21-37 yr old, wt 53.6-94.5 kg HPLC
DELIBERATE EXPOSURE; DRUGS; ANALGESICS; COMPARATIVE EVALUATIONS; BLOOD PLASMA; URINE; BIOAVAILABILITY Mason, W.D. 1984 Journal of Pharmaceutical Sciences 73(7):998-999				

Hydantoin, 3-ethyl-5-phenyl- (8 CI); 2,4-Imidazolidinedione, 3-ethyl-5-phenyl- (9 CI)
96-35-1
C11-H12-N2-O2
MW 204.22, MP 94 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10518 Blood, plasma	5 Ingestion	a) 9.1-15.0 ug/ml b) 30.0-59.2 ug/ml c) 36.9-74.5 ug/ml	a) 11.7 ug/ml b) 41.7 ug/ml c) 54.0 ug/ml	a) Peak, 1-2 hr after 500 mg b) Peak, 2-4 hr after 1500 mg c) Peak, 2-4 hr after 2500 mg Kinetics were nonlinear. Healthy adults, 25-32 yr, 57.3-82.7 kg Visual disturbances, gait dyscoordination HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS Meyer, M.C.; Holcombe, B.J.; Burckart, G.J.; Raghow, G.; Yau, M.K. 1983 Clinical Pharmacology and Therapeutics 33(3):329-334				

Hydantoin, 5-ethyl-3-methyl-5-phenyl- (8 CI); 2,4-Imidazolidinedione, 5-ethyl-3-methyl-5-phenyl- (9 CI)
50-12-4
C12-H14-N2-O2
MW 218.25, MP 136-137 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10519 Urine	a) 7 b) 7 Ingestion	a) Not given b) Not given	a) 193+/-13 umol b) 2.44+/-1.08 umol	a) Extensive metabolizers of mephenytoin b) Poor metabolizers of mephenytoin 4-OH metabolite, 24 hr recovery after 460 umol racemic mixture. Healthy volunteers TLC; Scintillation counting
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; NEUROLOGIC MANIFESTATIONS; CENTRAL NERVOUS SYSTEM DISEASES; ANTICONVULSANTS; BIOACCUMULATION; GENETIC EFFECTS; METABOLISM; METABOLITES; RADIONUCLIDES; DRUGS Kupfer, A.; Patwardhan, R.; Ward, S.; Schenker, S.; Preisig, R.; Branch, R.A. 1984 Journal of Pharmacology and Experimental Therapeutics 230(1):28-33				

Hydantoin, 5-ethyl-5-phenyl- (8 CI); 2,4-Imidazolidinedione, 5-ethyl-5-phenyl- (9 CI)
631-07-2
C11-H12-N2-O2
MW 204.22, MP 199 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10520 Blood, plasma	4 Ingestion	11-1.2 nmol/ml	Not applicable	1-15 d, peak (11 nmol/ml) on d 1 after 988 umol racemic mixture, extensive metabolizers of mephenytoin. Healthy volunteers GLC
10521 Urine	14 Ingestion	a) Not given b) Not given c) Not given d) Not given e) 63+/-25-158+/-26 umol f) 27+/-7-381+/-12 umol g) 70+/-6-310+/-24 umol h) 9+/-5-58+/-3 umol	a) 6.4+/-0.49 umol b) 7.0+/-0.52 umol c) 5.3+/-0.56 umol d) 0.83+/-0.04 umol e) Not applicable f) Not applicable g) Not applicable h) Not applicable	a) Extensive metabolizers of mephenytoin b) 4-OH-metabolite, extensive metabolizers of mephenytoin c) Poor metabolizers of mephenytoin d) 4-OH-metabolite, poor metabolizers of mephenytoin e) S-enantiomer f) R-enantiomer g) 4-OH-metabolite, S-enantiomer h) 4-OH-metabolite, R-enantiomer a-d) 24 hr recovery after 247 umol. e)-h) 1-16 d cumulative recovery after 988 umol racemic mixture. Healthy volunteers TLC; Scintillation Counting
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; NEUROLOGIC MANIFESTATIONS; CENTRAL NERVOUS SYSTEM DISEASES; ANTICONVULSANTS; BIOACCUMULATION; GENETIC EFFECTS; METABOLISM; METABOLITES; RADIONUCLIDES; DRUGS Kupfer, A.; Patwardhan, R.; Ward, S.; Schenker, S.; Preisig, R.; Branch, R.A. 1984 Journal of Pharmacology and Experimental Therapeutics 230(1):28-33				

Hydantoin, 5,5-diphenyl- (8 CI); 2,4-Imidasolidinedione, 5,5-diphenyl- (9 CI)
57-41-0
C15-H12-N2-O2
MW 252.26, MP 295-298 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10622 Blood	a) 74 b) 1	a) 0.1-35 mg/l b) Not applicable	a) 7.6 mg/l b) 8.0 mg/l	a) Non-drug deaths, 1975-1980 b) Multiple-drug related death, 1979-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1988 Journal of Analytical Toxicology 7:225-230				

Tissue	Cases Exposure Route	Range	Mean	General Information
10628 Blood, plasma	10	a) 18.0-42.0 ug/ml b) 8.6-42.0 ug/ml	a) 26.5 ug/ml b) 27.0 ug/ml	a) Initial steady-state level after 340 mg/d b) Pseudo steady-state level after change to 327 mg/d After reaching an apparent steady-state, levels may fluctuate considerably with a small dosage change. Clinical implications noted. Epileptic inpatients, 18-56 yr old, 5 males, 5 females Immunoassay
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; NEUROLOGIC MANIFESTATIONS; ANTICONVULSANTS; DRUG THERAPY; BIOACCUMULATION; DRUGS Theodore, W.H.; Qu, Z.-P.; Tsay, J.-Y.; Pitlick, W.; Porter, R.J. 1984 Clinical Pharmacology and Therapeutics 35(6):822-826				

Tissue	Cases Exposure Route	Range	Mean	General Information
10624 Blood, plasma	1 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 29 ug/ml b) 43 ug/ml c) 9.8 ug/ml d) 28 ug/ml e) 14.3 ug/ml	a) 300 mg/d. Before antibiotics b) Day 7 after antibiotic started c) Day 19. No phenytoin d 8-20. No antibiotic d 12-16 d) Day 40. Phenytoin, 100 mg/d, d 21-50. Antibiotics d 17-40 e) Day 50 Antibiotics: 500 mg miconazole IV 3X/d and flucytosine 2g oral, 4X/d. 51 yr old with epilepsy (20 yr duration) and chronic respiratory failure associated with pulmonary aspergillosis Nausea, vomiting, blurred vision Nystagmus
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; DRUG THERAPY; DRUG INTERACTION; ANTICONVULSANTS Rolan, P.E.; Somogyi, A.A.; Drew, M.J.R.; Cobain, W.G.; South, D.; Bochner, F. 1983 British Medical Journal 287:1760				

Hydantoin, 5,5-diphenyl- (8 CI); 2,4-Imidazolidinedione, 5,5-diphenyl- (9 CI)
57-41-0
C15-H12-N2-O2
MW 252.26, MP 296-298 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10525 Blood, plasma	8 Injection	a) Not given b) Not given c) Not given d) Not given e) Not applicable f) Not given g) Not applicable h) Not applicable	a) 0.34+/-0.16 ug/ml b) 0.50+/-0.23 ug/ml c) 0.56+/-0.30 ug/ml d) 0.82+/-0.29 ug/ml e) 6.3 ug/ml f) 6.5 ug/ml g) 7.0 ug/ml h) 6.8 ug/ml	a) 48 hr, control b) 48 hr, 400 mg cimetidine/d at bedtime c) 48 hr, 300 mg cimetidine 4x/d d) 48 hr, 600 mg cimetidine 4x/d e) 0 hr, control f) 0 hr, 400 mg cimetidine/d at bedtime g) 0 hr, 300 mg cimetidine 4x/d h) 0 hr, 600 mg cimetidine 4x/d 250 mg IV over 30 min. Cimetidine oral dosage begun 24 hr before and continued 48 hr after infusion. Cimetidine decreased phenytoin clearance. e)-h) estimated from graphs. Healthy subjects, 20-36 yr HPLC
BLOOD PLASMA; DRUGS; ANTICONVULSANTS; DRUG INTERACTION; DELIBERATE EXPOSURE; ADULTS; BIOACCUMULATION Bartle, W.R.; Walker, S.E.; Shapero, T. 1983 Clinical Pharmacology and Therapeutics 33(5):649-655				

Tissue	Cases Exposure Route	Range	Mean	General Information
10526 Blood, plasma	822	a) Not given b) Not given c) Not given	a) 13.8+/-8.51 mg/l b) 9.24+/-9.04 mg/l c) 8.94+/-6.61 mg/l	a) Adults, 288+/-72 mg/d b) Children, 157+/-70.5 mg/d c) Infants, 101+/-28.8 mg/d Steady-state. Patients, 1.33+/-0.52-29.5+/-15.2 yr old, wt 11.8+/-2.07-64.4+/-16.7 kg, ht 115+/-23.8-160+/-16.2 cm
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; DRUG THERAPY; BIOACCUMULATION; CHILDREN; INFANTS Grasela, T.; Steiner, L.; Rambeck, B.; Boenigk, H.; Dunlop, A.; Mullen, P.; Wadsworth, J.; Richens, A.; Ishizaki, T.; Chiba, K.; Miura, H.; Minagawa, K.; Blain, P.; Muchlow, J.; Bacon, C.; Rawlins, M. 1988 Clinical Pharmacokinetics 6:288-304				

Tissue	Cases Exposure Route	Range	Mean	General Information
10527 Blood, serum	6 Ingestion	<2.5-7.1 ug/ml	Not given	Day 15, 300 mg/d, 24 hr after last dose. Significantly increased theophylline clearance and elimination. Adult healthy nonsmokers, no other drugs, no xanthine foods
DRUGS; ADULTS; BLOOD SERUM; DELIBERATE EXPOSURE; ANTICONVULSANTS; DRUG THERAPY; DRUG INTERACTION Miller, M.; Cosgriff, J.; Kwong, T.; Morben, D.A. 1984 Clinical Pharmacology and Therapeutics 35(5):666-669				

Hydantoin, 5,5-diphenyl- (8 CI); 2,4-Imidazolidinedione, 5,5-diphenyl- (9 CI)
57-41-0
C15-H12-N2-O2
MW 252.26, MP 295-296 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10526 Blood, serum	10	a) 12-44 umol/l b) 0-54 umol/l c) 0-52 umol/l	a) 24.7 umol/l b) 27.2 umol/l c) 26.0 umol/l	a) Day 28. Concomitant with 13.7 mg/kg carbamazepine in 3 doses/d b) Day 56. With carbamazepine 2X/d during wk 5-8 c) Day 84. With carbamazepine 1X/d during wk 9-12 Ranges of means at 7-8 hr before medication. Daily dose of 200-400 mg phenytoin/patient, and regimen, unaltered during 12 wk. Total daily carbamazepine constant. 16-18 yr old epileptics

BLOOD SERUM; DELIBERATE EXPOSURE; CENTRAL NERVOUS SYSTEM DISEASES; ANTICONVULSANTS; DRUG INTERACTION; DRUG THERAPY; DRUGS; COMPARATIVE EVALUATIONS; METABOLISM; METABOLITES
Ghose, K.; Fry, D.E.; Christfides, J.A. 1983 European Journal of Clinical Pharmacology 24:375-381

Tissue	Cases Exposure Route	Range	Mean	General Information
10529 Blood, serum	42	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) 0.5-27 mg/L h) 4.0-30 mg/L	a) 4.5+/-3.5 mg/L b) 0.35+/-0.17 mg/L c) 30.2+/-14.8 mg/L d) 16.7+/-10.5 mg/L e) 0.20 +/-0.06 mg/L f) 2.0 mg/L g) Not given h) Not given	a) Uremic patients, parent drug b) Metabolite, 5-(4-hydroxyphenyl)-5-phenylhydantoin (HPPH) c) Metabolite, HPPH glucuronide d) Controls, parent drug $p<0.01$ e) Same metabolite as b) $p<0.001$ f) Same metabolite as c), estimated from text $p<0.01$ g) Uremic patients, samples measured by 3 immunoassays h) Controls All patients receiving chronic therapy. Amounts and times not given. HPLC; Immunoassay

BLOOD SERUM; DELIBERATE EXPOSURE; KIDNEY DISEASES; ANTICONVULSANTS; DRUGS; DRUG THERAPY; COMPARATIVE EVALUATIONS; HEMODIALYSIS; MEASUREMENT METHODS; BIOLOGICAL MONITORING; METABOLITES
Haughey, D.B.; Matzke, G.R.; Halstenson, C.E.; Keane, W.F. 1984 Journal of Analytical Toxicology 8:106-111

Tissue	Cases Exposure Route	Range	Mean	General Information
10530 Urine	9	a) 0-56.4 ug/ml b) 0-229.9 ug/ml c) 50.5-227.6 ug/ml d) 1.0-50.1 ug/ml	a) Not given b) Not given c) Not given d) Not given	a) Parent drug after 150-300 mg dose b) After 100-250 mg dose plus 300-600 mg of carbamazepine c) Metabolite, hydroxyphenytoin, same dose as a) d) Same dose as b) $P<0.05$ Sampled daily, 1-5 d after dose. 25-68 yr olds HPLC

URINE; JAPAN; DELIBERATE EXPOSURE; CENTRAL NERVOUS SYSTEM DISEASES; ANTICONVULSANTS; MEASUREMENT METHODS; DRUGS; DRUG THERAPY; METABOLITES
Sato, A.; Shimada, K. 1983 Journal of Chromatography 275:97-105

Hydratropic acid, m-benzoyl- (8 CI); Benzeneacetic acid, 3-benzoyl-alpha-methyl- (9 CI)
22071-15-4
C16-H14-O3
MW 254.29, MP 94 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10581 Blood, plasma	a) 7 b) 10 Ingestion	a) 20.9-2.1 mg/l b) 13.1-0.17 mg/l	a) Not given b) Not given	a) About 1 and 8 hr after 150 mg dose in elderly patients b) About 1 and 9 hr after 150 mg dose in young volunteers Given as profenid. Ranges of means. Level in a) consistently higher, volume of distribution and total clearance lower. Some values estimated from figure. Elderly rheumatic patients, mean age 86+/-2.4, and volunteers, mean age 24+/-1.8 HPLC
10582 Urine	a) 7 b) 10 Ingestion	a) 52.9-80.9 mg b) 86.1-118.1 mg	a) 69.0+/-4.4 mg b) 99.0+/-2.5 mg S.E.	a) Elderly patients b) Young volunteers Given as profenid. Cumulative excretion of glucuroconjugates at 24 hr after 150 mg dose. Excretion delayed in a). Elderly rheumatic patients, mean age 86+/-2.4, and volunteers, mean age 24+/-1.8 HPLC

BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; FRANCE; AGE; RHEUMATOID ARTHRITIS; ANTIINFLAMMATORY AGENTS; DRUGS
Advenier, C.; Roux, A.; Gobert, C.; Massias, P.; Varoquaux, O.; Flouvat, B. 1985 British Journal of Clinical Pharmacology 16:65-70

Hydratropic acid, p-isobutyl- (8 CI); Benzeneacetic acid, alpha-methyl-4-(2-methylpropyl)- (9 CI)
15687-27-1
C13-H18-O2
MW 206.27, MP 75-77 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10533 Blood	1	Not applicable	3.5 mg/l	Non-drug death, 1975-1980. Autopsy, Maryland State Medical Examiners office. Death

BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS
Caplan, Y.H.; Ottinger, W.E.; Crooke, C.R. 1983 Journal of Analytical Toxicology 7:226-230

Tissue	Cases Exposure Route	Range	Mean	General Information
10534 Blood, plasma	1 Ingestion	a) 80-1.5 ug/ml b) 40-1.5 ug/ml c) 40-0.1 ug/ml	a) Not applicable b) Not applicable c) Not applicable	a) 0.5-13 hr, peak (80 ug/ml) at 0.5 hr b) S(+)-isomer, 0.5-13 hr, peak (40 ug/ml) at 0.5 hr c) R(-)-isomer, 0.5-13 hr, peak (40 ug/ml) at 0.5 hr 800 mg administered as racemic mixture. New assay for optical isomers. Volunteer HPLC

BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; AUSTRALIA; DRUGS; BIOAVAILABILITY; METABOLISM
Lee, E.J.D.; Williams, K.M.; Graham, G.G.; Day, R.O.; Champion, G.D. 1984 Journal of Pharmaceutical Sciences 73(11):1542-1544

Hydratropic acid, p-isobutyl- (8 CI); Benzeneacetic acid, alpha-methyl-4-(2-methylpropyl)- (9 CI)
15687-27-1
C13-H18-O2
MW 206.27, MP 75-77 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10585 Blood, plasma	15 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 37.7+/-2.16 ug/ml b) 61.1+/-2.47 ug/ml c) 87.7+/-4.84 ug/ml d) 43.8+/-2.83 ug/ml e) 221+/-15.9 ng/ml f) 403+/-23.5 ng/ml g) 688+/-54.2 ng/ml h) 269+/-22.2 ng/ml	a) Bound and free (total), peak, 400 mg tablet b) Total, peak, 800 mg tablet c) Total, peak, 1200 mg tablet d) Total, peak, 400 mg solution e) Free, peak at 1.3+/-0.23 hr after 400 mg tablet f) Free, peak at 1.6+/-0.15 hr after 800 mg tablet g) Free, peak at 1.7+/-0.21 hr after 1200 mg tablet h) Free, peak at 0.71+/-0.14 hr after 400 mg solution. Healthy volunteers HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; RHEUMATOID ARTHRITIS; ANALGESICS; DRUG THERAPY; DRUGS; BIOACCUMULATION Lockwood, G.F.; Albert, K.S.; Gillespie, W.R.; Bole, G.G.; Harkcom, T.M.; Szpunar, G.J.; Wagner, J.G. 1983 Clinical Pharmacology and Therapeutics 34(1):97-103				

Tissue	Cases Exposure Route	Range	Mean	General Information
10536 Blood, serum	12 Ingestion	15.8+/-7.40-1.30+/-1.88 ug/ml	Not given	2 and 34 hr after 1st dose. 400 mg Motrin every 6 hr for 5 doses. Milk contained <1 ug/ml (lower limit of assay). 25.9+/-5.4 yr old volunteers, post-Cesarean deliveries GLC
BLOOD SERUM; MILK; DELIBERATE EXPOSURE; DRUGS Townsend, R.J.; Benedetti, T.J.; Erickson, S.H.; Cengiz, C.; Gillespie, W.R.; Gschwend, J.; Albert, K.S. 1984 American Journal of Obstetrics and Gynecology 149(2):184-186				

Tissue	Cases Exposure Route	Range	Mean	General Information
10537 Blood, serum	a) 29 b) 9 c) 6 Ingestion	a) Not given b) Not given c) Not given	a) 27.9+/-7.6 ug/ml b) 22.0+/-4.4 ug/ml c) 21.1+/-5.4 ug/ml	a) Controls, peak at 1.9+/-1.4 hr b) Fair liver function patients, peak at 1.5+/-0.7 hr c) Poor liver function patients, peak at 2.6+/-2.2 hr After 400 mg oral Only slight differences between normals and patients. Healthy volunteers, and patients with alcoholic liver disease GLC
BLOOD SERUM; BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; LIVER DISEASES; DRUG THERAPY; DRUGS; BIOACCUMULATION; METABOLISM; METABOLITES; ALCOHOLIC BEVERAGES Juhl, R.P.; Van Thiel, D.H.; Dittert, L.W.; Albert, K.S.; Smith, R.B. 1983 Clinical Pharmacology and Therapeutics 34(1):104-109				

Hydratropic acid, p-isobutyl- (8 CI); Benzeneacetic acid, alpha-methyl-4-(2-methylpropyl)- (9 CI)
15687-27-1
C13-H18-O2
MW 206.27, MP 75-77 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10538 Blood, serum	20 Ingestion	a) Not given b) Not given	a) 40.5+/-0.8 mcg/ml b) 42.3+/-11.6 mcg/ml	a) Peak 1.4+/-0.7 hr after last dose of 400 mg q.i.d. for 2 d b) Peak 1.4+/-0.7 hr after last dose of 400 mg q.i.d. and 650 mg acetaminophen q.i.d. for 2 d Healthy volunteers, 19-42 yr old, wt 54-88 kg, 12 males, 8 females GC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; ANALGESICS; DRUGS; DRUG THERAPY; DRUG INTERACTION; COMPARATIVE EVALUATIONS; BIOACCUMULATION; ANTIPYRETICS Wright, C.E., III; Antal, E.J.; Gillespie, W.R.; Albert, K.S. 1983 Clinical Pharmacology and Therapeutics 34(5):707-710				

Tissue	Cases Exposure Route	Range	Mean	General Information
10539 Urine	15 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 13.7+/-0.82% b) 11.3+/-1.11% c) 10.7+/-0.83% d) 13.0+/-1.32% e) 84.0+/-3.02% f) 77.7+/-3.92% g) 77.4+/-3.46% h) 75.7+/-5.03%	a) Conjugated parent, 400 mg tablet b) Conjugated parent, 800 mg tablet c) Conjugated parent, 1200 mg tablet d) Conjugated parent, 400 mg solution e) Parent and metabolites, 400 mg tablet f) Parent and metabolites, 800 mg tablet g) Parent and metabolites, 1200 mg tablet h) Parent and metabolites, 400 mg solution % recovery. Individual metabolite data also given. Healthy volunteers HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; RHEUMATOID ARTHRITIS; ANALGESICS; DRUG THERAPY; DRUGS; BIOACCUMULATION Lockwood, G.F.; Albert, K.S.; Gillespie, W.R.; Bole, G.G.; Harkcom, T.M.; Szpunar, G.J.; Wagner, J.G. 1983 Clinical Pharmacology and Therapeutics 34(1):97-103				

Hydratropic acid, 3-chloro-4-(3-pyrrolin-1-yl)- (8 CI); Benzeneacetic acid, 3-chloro-4-(2,5-dihydro-1H-pyrrol-1-yl)-alpha-methyl- (9 CI)
31798-07-4
C13-H14-Cl-N-O2
MW 251.73

Tissue	Cases Exposure Route	Range	Mean	General Information
10540 Blood, plasma	1 Ingestion	a) 50-420 nmole/g b) 50-310 nmole/g	a) Not given b) Not given	a) Flash-methylation procedure b) Nitrogen-specific detection procedure Estimated from graph. Measured pirprofent and pyrrole analog 30 min (peak)-12 hr after ingestion of 400 mg solution. 41 yr old, 72 kg healthy volunteer GC

(next page)

Hydratropic acid, 3-chloro-4-(3-pyrrolin-1-yl)- (8 CI); Benseneacetic acid, 3-chloro-4-(2,5-dihydro-1H-pyrrol-1-yl)-alpha-methyl- (9 CI)
31793-07-4
C13-H14-Cl-N-O2
MW 251.75

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
10541 Urine	1 Ingestion	Not given	50%	% excretion of single 400 mg dose (capsule), as pirprofen or pyrrole analog and metabolites. Cumulative over 24 hr. 48 yr old, 60 kg healthy volunteer GC
MEASUREMENT METHODS; DRUGS; DELIBERATE EXPOSURE; BLOOD PLASMA; URINE; ANALGESICS; COMPARATIVE EVALUATIONS; ANTIINFLAMMATORY AGENTS Degen, P.H.; Schweizer, A.; Siouf, A. 1986 Journal of Chromatography 290:33-43				

Hydrazinecarboxylic acid, 2-(6-(ethyl(2-hydroxypropyl)amino)-3-pyridazinyl)-, ethyl ester
64241-34-5
C12-H21-N5-O3

Tissue	Cases Exposure Route	Range	Mean	General Information
10542 Blood, plasma	2 Ingestion	a) 0.5-<0.1 nmol/g b) 1.4-<0.1 nmol/g	a) Not given b) Not given	a) 1 and 10 hr after 10 mg dose b) 1 and 10 hr after 20 mg dose Area-under-the-curve values were 1.921 and 4.385 (nmol/g)(h), respectively. Healthy volunteers HPLC
10543 Urine	2 Ingestion	a) Not given b) Not given	a) 79.9% b) 71.7% % of dose	a) 10 mg dose b) 20 mg dose Sampled over 24 hr. Unchanged drug. Healthy volunteers HPLC
DRUGS; MEASUREMENT METHODS; HYPERTENSION; BLOOD PRESSURE; URINE; BLOOD PLASMA; ANTIHYPERTENSIVE AGENTS; VASODILATORS; DELIBERATE EXPOSURE Hauffe, S.A.; Dubois, J.P. 1984 Journal of Chromatography 290:223-230				

Hydrocinnamic acid, beta-(aminomethyl)-p-chloro- (8 CI); Benzenepropanoic acid, beta-(aminomethyl)-4-chloro- (9 CI)
1134-47-0
C10-H12-Cl-N-O2
MW 213.67, MP 206-208 C, also reported as 189-191 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10544 Blood, plasma	1 Ingestion	8-0.8 ug/ml	Not applicable	2.7 and 17.5 hr after estimated dose of 1230 mg. From Lioresal tablets. Also took 100 mg diazepam. Estimated increased plasma clearance (Clp=0.368 l/kgXh) and higher volume of distribution (Vd area=2.4 l/kg) compared to normal. 19 yr old, suicide attempt Comatose, shallow ventilation, standard reflexes absent ECG sinus rhythm rate 45-50/min. Arterial blood gases abnormal GC/MS

(next page)

Hydrocinnamic acid, beta-(aminomethyl)-p-chloro- (8 CI); Benzenepropanoic acid, beta-(aminomethyl)-4-chloro- (9 CI)
1134-47-0
C10-H12-Cl-N-O2
MW 213.67, MP 206-208 C, also reported as 189-191 C

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
10545 Urine	1 Ingestion	12-0.03 mg/hr	Not applicable	Predominately linear excretion rate from 17.5-59 hr after estimated dose of 1250 mg. 19 yr old, suicide attempt Comatose, shallow ventilation, standard reflexes absent ECG sinus rhythm rate 45-50/min. Arterial blood gases abnormal GC/MS
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; SWEDEN; ADULTS; ANTICONVULSANTS; BIOACCUMULATION; BIOLOGICAL MONITORING; SUICIDE				
Andersen, P.; Noher, H.; Swahn, C.G. 1984 Clinical Toxicology 22(1):11-20				

Imidazo(1,5-a)pyridine-5-hexanoic acid
85691-74-8
C13-H16-N2-O2

Tissue	Cases Exposure Route	Range	Mean	General Information
10546 Blood, plasma	5 Ingestion	a) 690+/-140-50+/-10 ng/ml b) 1360+/-60-20+/-5 ng/ml	a) Not applicable b) Not applicable	a) 1-4 hr after 100 mg b) 1-6 hr after 300 mg Inhibited thromboxane formation without coincident depression of prostacyclin biosynthesis. Healthy volunteers GC/MS
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; ANTICOAGULANTS; BIOACCUMULATION; METABOLITES; DRUGS				
FitzGerald, G.A.; Oates, J.A. 1984 Clinical Pharmacology and Therapeutics 35(5):633-640				

Tissue	Cases Exposure Route	Range	Mean	General Information
10547 Blood, plasma	10 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 2.3 ug/ml b) 1.4 ug/ml c) 0.8 ug/ml d) 0.5 ug/ml e) 0.1 ug/ml f) 0.04 ug/ml	a) 100 mg b) 75 mg c) 50 mg d) 25 mg e) 10 mg f) 5 mg Peaks 0.5 hr after dose indicated. Drug detectable at 6 hr in three highest doses only. Healthy volunteers HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; HORMONES; DRUGS; DRUG THERAPY; BIOACCUMULATION				
MacNab, M.W.; Foltz, E.L.; Graves, B.S.; Rinehart, R.K.; Tripp, S.L.; Feliciano, N.R.; Sen, S. 1984 Journal of Clinical Pharmacology 24:76-83				

Imidazo(2,1-b)quinazolin-2(3H)-one, 6-chloro-1,5-dihydro-3-methyl-, (R)-
70018-51-8
C11-H10-Cl-N3-O

Tissue	Cases Exposure Route	Range	Mean	General Information
10548 Blood, plasma	1 Injection	107-0.7 ng/ml	Not given	<1 and 8 hr after 7.5 mg, IV. Estimated from graph. Healthy Volunteer HPLC
10549 Urine	1 Injection	<10-25.6 ng/ml	Not given	1 and 3 hr after single IV dose of 7.5 mg. Healthy Volunteer HPLC
DELIBERATE EXPOSURE; DRUGS; BLOOD PLASMA; URINE; MEASUREMENT METHODS; HEART DISEASES Haefelfinger, P.; Hess, B. 1984 Journal of Chromatography 305:153-161				

Imidazole-1-ethanol, alpha-(methoxymethyl)-2-nitro- (8 CI); 1H-Imidazole-1-ethanol, alpha-(methoxymethyl)-2-nitro- (9 CI)
13551-87-6
C7-H11-N3-O4
MW 201.11

Tissue	Cases Exposure Route	Range	Mean	General Information
10550 Blood, plasma	a) 6 b) 6 c) 6 d) 6 e) 6 f) 6 g) 1 h) 1 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 49+/-5 umol/l b) 49+/-6 umol/l c) 53+/-4 umol/l d) 49+/-4 umol/l e) 41+/-2 umol/l f) 42+/-3 umol/l g) 5 umol/l h) 25 umol/l	a) Peak, controls, 1 gm/sq m plus 200 ml water b) Peak, phenytoin treatment of 300 mg/d for 7 d, then 1.0 gm/sq m plus 200 ml water c) Peak, controls, 1.0 gm/sq m plus 200 ml water d) Peak phenobarbitol treatment of 200 mg/d for 7 d, then 1.0 g/sq m plus 200 ml water e) Peak, controls, 1.0 gm/sq m plus 200 ml water f) Peak, ascorbic acid treatment of 2 gm/d for 14 d, then 1.0 gm/sq m and 200 ml water g) Peak, desmethyl-metabolite, controls h) Peak, desmethyl-metabolite, phenytoin treatment. Healthy volunteers HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; AUSTRALIA; ADULTS; ANTITUMOR AGENTS; DRUGS; DRUG INTERACTION; VITAMIN C; BIOACCUMULATION; METABOLITES; RADIATION DOSES Williams, K.; Begg, E.; Phil, D.W.D.; O'Shea, K. 1983 Clinical Pharmacology and Therapeutics 33(3):314-321				

Tissue	Cases Exposure Route	Range	Mean	General Information
10551 Blood, plasma	4 Injection	Not given	55.8 +or- 3.2 ug/ml	3 hr after 3.4 +or- 0.2 g IP, with abdominal irradiation Patients with advanced ovarian carcinoma Nausea, vomiting, diarrhea. HPLC

(next page)

Imidazole-1-ethanol, alpha-(methoxymethyl)-2-nitro- (8 CI); 1H-Imidazole-1-ethanol, alpha-(methoxymethyl)-2-nitro- (9 CI)
13551-87-6
C7-H11-N3-O4
MW 201.11

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
10552 Peritoneal fluid	4 Injection	Not given	426 +or- 107 ug/m'	3 hr after 3.4 +or- 0.2 g IP, with abdominal irradiation Patients with advanced ovarian carcinoma Nausea, vomiting, diarrhea. HPLC
ADULTS; CARCINOMAS; BLOOD PLASMA; PERITONEAL FLUID; DRUGS; CHEMOTHERAPY; NEOPLASMS Gianni, L.; Jenkins, J.F.; Greene, R.F.; Lichter, A.S.; Myers, C.E.; Collins, J.M. 1983 Cancer Research 43:913-916				

Imidazole-1-ethanol, 2-methyl-5-nitro- (8 CI); 1H-Imidazole-1-ethanol, 2-methyl-5-nitro- (9 CI)
443-48-1
C6-H9-N3-O3
MW 171.16, MP 158-160 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10553 Blood, plasma	9 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given	a) 16.3+/-4.2 mg/L b) 5.4+/-1.8 mg/L c) 3.13+/-0.60 mg/L d) 0.46+/-0.36 mg/L e) 23.9+/-7.1 mg/L f) 26.5+/-5.9 mg/L g) 13.4+/-3.7 mg/L h) 10 mg/L i) 6 mg/L j) 19 mg/L	a) Peak, at end of 1st infusion b) Trough, 8 hrs after 1st infusion c) Metabolite 1, the alcohol, peak, 8 hrs after 1st infusion d) Metabolite 2, the acid, peak, 8 hrs after 1st infusion e) Steady state, at end of 4th infusion f) Peak, at end of 8th infusion g) Trough, 8 hrs after 8th infusion h) Metabolite 1, at end of 4th infusion, before 1st hemodialysis i) Metabolite 1, 6 hrs after 4th infusion, after 1st hemodialysis j) Metabolite 1, before 3rd hemodialysis 20 min 7.5 mg/kg IV every 8 hrs. Hemodialysis after 4th infusion and at intervals thereafter as needed. Patients cumulated metabolites until hemodialysis. Patients with acute renal failure, 33-78 yr old, 58-79 kg. In intensive care, undergoing dialysis HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; ANTIBIOTICS; DRUGS; HEMODIALYSIS; METABOLITES Roux, A.P.; Moirot, E.; Delhotal, B.; Leroy, J.A.; Bonmarchand, G.P.; Humbert, G.; Flouvat, B. 1984 Clinical Pharmacology and Therapeutics 36(3):363-368				

Imidazole-1-ethanol, 2-methyl-5-nitro- (8 CI); 1H-Imidazole-1-ethanol, 2-methyl-5-nitro- (9 CI)
443-48-1
C6-H9-N3-O3
MW 171.16, MP 158-160 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10554 Blood, plasma	4 Injection	a) 10-1 mg/l b) 25-1 mg/l c) 72-4 mg/l d) 42-4 mg/l e) 1-10 mg/l	a) Not given b) Not given c) Not given d) Not given e) Not given	a) Initially and 14 hr after 0.5 g b) Initially and 24 hr after 1.0 g c) Initially and 24 hr after 2.0 g d) Initially and 24 hr after 1.5 g e) Ethoxy metabolite, initially and 8 hr after 1.5 g Estimated from graph. IV formulation absorbed faster than oral Patients with malignant brain tumors HPLC
ADULTS; CARCINOMAS; NEOPLASMS; BLOOD PLASMA; DRUG INTERACTION; DRUG THERAPY; DRUGS Urtasun, R.C.; Rabin, H.R.; Partington, J. 1983 Surgery 93(1):145-148				

Tissue	Cases Exposure Route	Range	Mean	General Information
10555 Blood, plasma	17 Ingestion Injection	a) Not given b) Not given c) Not given d) Not given	a) 83.1+/-4.6 h.mg/l b) 124.7+/-6.7 h.mg/l c) 81.1+/-6.2 h.mg/l d) 76.6+/-5.2 h.mg/l	a) 8 hr area under curve after 500 mg IV, 10 cases b) 8 hr area under curve after 500 mg oral, preceeded by 4 d of IV treatment c) 8 hr area under curve after 500 mg IV d) 8 hr area under curve after 500 mg IV, preceeded by 4 d of IV treatment Unexpected 51% increase in AUC when IV changed to oral therapy. Patients, 18-72 yr old, who had undergone gastrointestinal surgery HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; FRANCE; ADULTS; GASTROINTESTINAL DISEASES; INFECTION; ANTIBIOTICS; DRUG THERAPY; BIOACCUMULATION; BIOAVAILABILITY; SURGERY; DRUGS Thiercelin, J.F.; Diquet, B.; Leveseque, C.; Ghesquiere, F.; Simon, P.; Viars, P. 1984 Clinical Pharmacology and Therapeutics 35(4):510-519				

Tissue	Cases Exposure Route	Range	Mean	General Information
10556 Blood, serum	9 Injection	a) Not given b) Not given	a) 5.7+/-0.3 ug/ml b) 6.0+/-0.4 ug/ml	a) 500 mg metronidazole b) Same dose plus 1 g aztreonum Maxima after 30 min infusion. Healthy subjects, Caucasian, average age 24 yr, ht 178 cm, wt 74 kg HPLC
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ANTIBIOTICS; COMPARATIVE EVALUATIONS; DRUG INTERACTION; DRUGS Creasey, W.A.; Adamovics, J.; Dhruv, R.; Plat, T.B.; Sugerman, A.A. 1984 Journal of Clinical Pharmacology 24:174-180				

Imidazole-1-ethanol, 2-methyl-5-nitro- (8 CI); 1H-Imidazole-1-ethanol, 2-methyl-5-nitro- (9 CI)
443-48-1
C6-H9-N3-O3
MW 171.16, MP 158-160 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10557 Blood, serum	1 Ingestion	240-640 ug/ml	Not applicable	Levels at approximately 16 and 36 hr after ingesting 78 tablets (19.5 g) and 1 pt vodka. Highest recorded overdose, recovery uneventful. Attempted suicide, 27 yr old Nausea HPLC
BLOOD SERUM; ADULTS; SUICIDE; DRUG ABUSE; ANTIBIOTICS; FORENSIC MEDICINE; ALCOHOLIC BEVERAGES; BIOACCUMULATION; DRUGS Siegel, J.A.; Weiss, S. 1984 Journal of Forensic Sciences 29(2):639-643				

Tissue	Cases Exposure Route	Range	Mean	General Information
10558 Blood, serum	22 Injection Ingestion Rectal Vaginal	a) 0.5-9 ug/ml b) 6.5-0 ug/ml c) 7.5-0 ug/ml d) 1.5-0 ug/ml S.E.	a) Not given b) Not given c) Not given d) Not given	a) 3 min after beginning, and at end of, 20 min IV infusion 500 mg (Flagyl). 1.5 ug/ml at 23 hr. 6 cases b) 2 and 48 hr after 500 mg tablet (Elyzol), oral. 2.5 ug/ml at 0.25 hr. 9 cases c) 4 and 48 hr after 1 g (Flagyl) rectal. 0.5 ug/ml at 0.25 hr. 6 cases d) 8 and 48 hr after 500 mg (Flagyl) vaginally. 0.5 ug/ml at 1.5 hr. 6 cases Ranges of means. Values estimated from figure. Healthy volunteers, mean age 22-23 HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ANTIBIOTICS; DRUGS; COMPARATIVE EVALUATIONS; METABOLISM Mattila, J.; Manniste, P.T.; Mantyla, R.; Nykanen, S.; Lamminsivu, U. 1983 Antimicrobial Agents and Chemotherapy 23(5):721-725				

Tissue	Cases Exposure Route	Range	Mean	General Information
10559 Blood, serum	10 Injection	a) 16-3.5 ug/ml b) 0.2-3.8 ug/ml c) 0.2-2.1 ug/ml d) 17-1.8 ug/ml e) 0.1-3.1 ug/ml f) 0.29-3 ug/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) Continuous ambulatory peritoneal dialysis, parent drug b) Alcohol metabolite 1-(2-hydroxyethyl)-2-hydroxymethyl-5-nitroimidazole, plateau at 8 hr c) Acid metabolite (2-methyl-5-nitro-1-imidazolyl) acetic acid d) Controls (hemodialysis patients studied on off dialysis days), parent drug e) Same metabolite as b), peak 3.8 ug/ml at 8 hr f) Same metabolite as c), plateau at 8 hr 0.2 and 24 hr after 750 mg IV over 20-45 min. Ranges of means. Estimated from graph. 33-69 yr old, wt 56-88 kg, ht 160-185 cm HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; CANADA; ANTIBIOTICS; DRUGS; METABOLITES; BIOACCUMULATION Gusy, D.R.; Meatherall, R.C.; Baxter, H.; Jacyk, W.R.; Penner, B. 1984 Antimicrobial Agents and Chemotherapy 25(3):306-310				

Imidazole-1-ethanol, 2-methyl-5-nitro- (8 CI); 1H-Imidazole-1-ethanol, 2-methyl-5-nitro- (9 CI)
443-48-1
C6-H9-N3-O3
MW 171.16, MP 158-160 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10560 Brain	1 Injection	a) 4-10 mg/l b) 0-2 mg/l	a) Not given b) Not given	a) 0.5 and 4 hr after 1.5 g. Plasma level 42-20 mg/l b) Ethoxy metabolite 0.5 and 4 hr after 1.5 g. Plasma levels 0-5 mg/l Intravenous. Estimated from graph Patients with malignant brain tumors HPLC
ADULTS; CARCINOMAS; NEOPLASMS; BLOOD PLASMA; DRUG INTERACTION; DRUG THERAPY; DRUGS Urtasun, R.C.; Rabin, H.R.; Partington, J. 1983 Surgery 93(1):145-148				

Tissue	Cases Exposure Route	Range	Mean	General Information
10561 Urine	9 Injection	a) Not given b) Not given	a) 22.4+/-0.7% b) 21.6+/-1.6%	a) 500 mg metronidazole b) Same dose plus 1 g aztreonam % dose excreted in 24 hrs after 30 min infusion. Healthy subjects, caucasian, average age 24 yrs, ht 178 cm, wt 74 kg HPLC
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ANTIBIOTICS; COMPARATIVE EVALUATIONS; DRUG INTERACTION; DRUGS Creasey, W.A.; Adamovics, J.; Dhruv, R.; Plat, T.B.; Sugerman, A.A. 1984 Journal of Clinical Pharmacology 24:174-180				

Imidazole-5-carboxylic acid, 1-(alpha-methylbenzyl)-, ethyl ester, (R)-(+)- (8 CI); 1H-Imidazole-5-carboxylic acid, 1-(1-phenylethyl)-, ethyl ester, (R)- (9 CI)
88125-97-2
C14-H16-N2-O2

Tissue	Cases Exposure Route	Range	Mean	General Information
10562 Blood, plasma	1 Injection	1150-35 ng/ml	Not given	At end of, and 270 min after, 0.3 mg/kg IV. Hypnosis maintained for 31 min by continuous infusion 0.1% at a rate 0.1 mg/kg/min for 10 min, then 0.01 mg/kg/min for remainder of anesthesia Values, estimated from figure, representative of 23 cases. Mean level on awakening (average 20+/-9 min after end of infusion) 297+/-74 ng/ml. Anesthesia assisted by use of fentanyl, droperidol and pancuronium. Improved analytical method. Healthy subjects undergoing minor gynecologic surgery, mean age 35+/-10, wt 64+/-12 kg Postoperative nausea or vomiting in 4 cases HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ANESTHETICS; DRUG THERAPY; DRUGS; HYPNOTICS; MEASUREMENT METHODS; SURGERY Avram, M.J.; Fragen, R.J.; Linde, H.W. 1983 Journal of Pharmaceutical Sciences 72(12):1424-1425				

Imidazole, 1-(2-(ethylsulfonyl)ethyl)-2-methyl-5-nitro- (8 CI); 1H-Imidazole, 1-(2-(ethylsulfonyl)ethyl)-2-methyl-5-nitro- (9 CI)
19387-91-8
C8-H13-N3-O4-S
MW 247.26, MP 127-128 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10663 Blood, plasma	a) 12 b) 5 Injection	a) 22.6-0.4 mg/l b) 12-0.6 mg/l	a) Not applicable b) Not applicable	a) 0-96 hrs, peak (22.6 mg/l) immediately after 800 mg infusion, patients with renal insufficiency b) 0-60 hrs, peak (12 mg/l) immediately after 800 mg infusion administered 1 hr before undergoing hemodialysis. 28-81 yr olds HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; FRANCE; INFECTION; ANTIBIOTICS; HEMODIALYSIS; DRUGS; DRUG THERAPY; BIOACCUMULATION Plouvat, B.L.; Imbert, C.; Dubois, D.M.; Temperville, B.P.; Roux, A.P.; Chevalier, G.C.; Humbert, G. 1983 British Journal of Clinical Pharmacology 15:735-741				

Tissue	Cases Exposure Route	Range	Mean	General Information
10664 Blood, serum	22 Injection Ingestion Rectal Vaginal	a) 0.5-8 ug/ml b) 0-1 ug/ml c) 7-1 ug/ml d) 1-0 ug/ml	a) Not given b) Not given c) Not given d) Not given	a) 3 min after beginning, and at end of, 20 min IV infusion 500 mg (Tricanix). 3 ug/ml at 23 hr. 6 cases b) 3 and 48 hr after 500 mg tablet, oral. 3 ug/ml at 0.25 hr. 9 cases c) 4 and 48 hr after 1 g rectally. 1 ug/ml at 0.25 hr. 6 cases d) 8 and 48 hr after 500 mg, vaginal. 0.5 ug/ml at 3 hr. 6 cases Ranges of means. Values estimated from figure. Healthy volunteers, mean age 22-28 HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ANTIBIOTICS; DRUGS; COMPARATIVE EVALUATIONS; METABOLISM Mattila, J.; Manniste, P.T.; Mantyla, R.; Nykanen, S.; Lamminsivu, U. 1983 Antimicrobial Agents and Chemotherapy 23(5):721-725				

Tissue	Cases Exposure Route	Range	Mean	General Information
10665 Urine	11 Injection	4.9-11.3%	7.7+/-0.7%	% dose excreted as unchanged drug. Patients with renal insufficiency HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; FRANCE; INFECTION; ANTIBIOTICS; HEMODIALYSIS; DRUGS; DRUG THERAPY; BIOACCUMULATION Plouvat, B.L.; Imbert, C.; Dubois, D.M.; Temperville, B.P.; Roux, A.P.; Chevalier, G.C.; Humbert, G. 1983 British Journal of Clinical Pharmacology 15:735-741				

Indole-3-acetic acid, 1-(p-chlorobensoyl)-5-methoxy-2-methyl- (8 CI); 1H-Indole-3-acetic acid, 1-(4-chlorobensoyl)-5-methoxy-2-methyl- (9 CI)
53-86-1
C19-H16-Cl-N-O4
MW 357.81, MP different forms 155 C, 162 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10566 Blood	1 Ingestion	Not given	<0.3 ug/ml	Autopsy. Dose unknown. Combined levels of ethanol, methanol, isopropanol <5 mg/dl. Data also for clomipramine, somepirac, caffeine, salicylates, acetaminophen, oxycodone, lorazepam. 57 yr old treated for depression, joint pain. Excessive drinking on occasion. Confusion, weakness, intoxication, death. Death due to clomipramine toxicity. TLC
AUTOPSIES; BEHAVIOR DISORDERS; NEUROLOGIC MANIFESTATIONS; BLOOD; URINE; ANTIDEPRESSIVE AGENTS; ANALGESICS; DRUGS; DRUG ABUSE; ALCOHOLS; METABOLITES; CASE HISTORIES; DELIBERATE EXPOSURE				
Meatherall, R.C.; Guay, D.R.P.; Chalmers, J.L.; Keenan, J.R. 1985 Journal of Analytical Toxicology 7:168-171				

Tissue	Cases Exposure Route	Range	Mean	General Information
10567 Blood, plasma	15 Ingestion Injection	a) 1.06-0.5 ug/ml b) 1.3-0.4 ug/ml c) 3.75-1.2 ug/ml d) 1.23-0.55 ug/ml	a) 0.68+/-0.18 ug/ml b) 0.76+/-0.16 ug/ml c) 1.00+/-0.33 ug/ml d) 0.67+/-0.20 ug/ml	a) 3 (broad peak)-12 hr, GITS-A, 75 mg b) 4 (broad peak)-12 hr, GITS-B, 75 mg c) 1.7 (sharp peak)-12 hr, 3X25 mg capsules given at time 0 d) 1.6 (1st peak)-12 hr, 0.3 ug/ml trough at 4 hr, 1.2 ug/ml 2nd peak at 9 hr, 25 mg capsules at 0, 4, and 8 hr Ranges of means and mean 12-h levels. GITS are gastrointestinal therapeutics systems which deliver drug osmotically. Estimated from graph. Healthy volunteers GC-EC
BLOOD PLASMA; URINE; BODY; DELIBERATE EXPOSURE; DRUGS; COMPARATIVE EVALUATIONS; METABOLISM; BIOAVAILABILITY				
Rogers, J.D.; Lee, R.B.; Souder, P.R.; Ferguson, R.K.; Davies, R.O.; Theeuwes, F.; Kwan, K.C. 1985 International Journal of Pharmaceutics 16:191-201				

Tissue	Cases Exposure Route	Range	Mean	General Information
10568 Blood, plasma	14 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 1.87+/-1.03 ug/ml b) 2.32+/-1.12 ug/ml c) 1.20+/-0.65 ug/ml d) 1.67+/-0.60 ug/ml e) 687+/-238 ug.min/ml f) 615+/-153 ug.min/ml	a) Peak 1.93+/-0.73 hr after 75 mg controlled release (CR) form, day 1 b) Peak 2.45+/-1.09 hr after 75 mg CR, day 7 c) Peak 1.30+/-1.00 hr after 25 mg t.i.d., day 1 d) Peak 1.00+/-0.50 hr after 25 mg t.i.d., day 7 e) Area under curve (AUC), 0-24 hr on day 7 after 75 mg CR f) AUC, 0-24 hr on day 7 after 25 mg t.i.d. Controlled release formulation bioequivalent of ordinary capsule. Healthy volunteers, 21-25 yr old, wt 60-90 kg Vague abdominal pain, nausea, vertigo, headache, nervousness, diarrhea SPF
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; RHEUMATOID ARTHRITIS; ANALGESICS; ANTIPYRETICS; ANTIINFLAMMATORY AGENTS; DRUGS; DRUG THERAPY; COMPARATIVE EVALUATIONS; BIOACCUMULATION; METABOLITES				
Verbesselt, R.; Tjandramaga, T.B.; Mullie, A.; De Schepper, P.J.; Cook, T.; Derouwaux, C.; Kramp, R.; Hwang, S. 1985 European Journal of Clinical Pharmacology 24:563-568				

Indole-3-acetic acid, 1-(p-chlorobenzoyl)-5-methoxy-2-methyl- (8 CI); 1H-Indole-3-acetic acid, 1-(4-chlorobenzoyl)-5-methoxy-2-methyl- (9 CI)
53-86-1
C19-H16-Cl-N-O4
MW 357.81, MP different forms 155 C, 162 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10569 Body	15 Ingestion Injection	a) 7.4-8.5 mg b) 8-8.5 mg c) 24.1-1.5 mg d) 6-8.5 mg	a) Not given b) Not given c) Not given d) Not given	a) 4-12 hr, GITS-A, 75 mg b) 4-12 hr, GITS-B, 75 mg c) 2-12 hr, 8X25 mg capsules d) 1.1-12 hr, 6 mg (2nd peak) at 9 hr, 5 mg (trough) at 4 hr, 25 mg capsule at 0, 4, and 8 hr Total amount in body. Ranges of means, estimated from graphs. GITS are gastrointestinal therapeutics systems which deliver drug osmotically. Peaks in a) and b) are very broad. Healthy volunteers GC-EC
10570 Urine	15 Ingestion Injection	a) Not given b) Not given c) Not given d) Not given	a) 16.6+/-4.5 mg b) 16.3+/-4.0 mg c) 17.9+/-3.1 mg d) 16.7+/-3.4 mg	a) GITS-A, 75 mg b) GITS-B, 75 mg c) Three 25 mg capsules, once/d d) One 25 mg capsule, 3X/d Total recovery. GITS are gastrointestinal therapeutics systems which deliver drug osmotically. Healthy volunteers GC-EC
BLOOD PLASMA; URINE; BODY; DELIBERATE EXPOSURE; DRUGS; COMPARATIVE EVALUATIONS; METABOLISM; BIOAVAILABILITY Rogers, J.D.; Lee, R.B.; Souder, P.R.; Ferguson, R.K.; Davies, R.O.; Theeuwes, F.; Kwan, K.C. 1983 International Journal of Pharmaceutics 16:191-201				

Tissue	Cases Exposure Route	Range	Mean	General Information
10571 Urine	14 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 15.8+/-8.6 mg b) 15.9+/-8.2 mg c) 14.8+/-6.5 mg d) 15.3+/-9.5 mg	a) Day 1, 75 mg controlled release form b) Day 7, 75 mg controlled release form c) Day 1, 25 mg t.i.d. ordinary capsule d) Day 7, 25 mg t.i.d. ordinary capsule 24 hr recovery. Controlled release formulation bioequivalent of ordinary capsule. Healthy volunteers, 21-25 yr old, wt 69-90 kg Vague abdominal pain, nausea, vertigo, headache, nervousness, diarrhea SPF
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; RHEUMATOID ARTHRITIS; ANALGESICS; ANTIPYRETICS; ANTIINFLAMMATORY AGENTS; DRUGS; DRUG THERAPY; COMPARATIVE EVALUATIONS; BIOACCUMULATION; METABOLITES Verbeeselt, R.; Tjandramaga, T.B.; Mullie, A.; De Schepper, P.J.; Cook, T.; Derouwaux, C.; Kramp, R.; Hwang, S. 1983 European Journal of Clinical Pharmacology 24:565-568				

Insulin
9004-10-8
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Tissue	Cases Exposure Route	Range	Mean	General Information
10572 Blood, plasma	14 Injection	154-32,000 mu/l	Not given	Peak immunoreactive levels after alleged doses 100-4000 U. Good correlation between levels and doses. 18 patients responded to dextrose injections, 2 died. Deliberate over-dose victims, 16-43 yr old Many patients hyperglycemic, three hypokalamic. Two had fatal brain damage.
BLOOD PLASMA; DELIBERATE EXPOSURE; SCOTLAND; CASE HISTORIES; SUICIDE; DIABETES; DRUG ABUSE; DRUGS Critchley, J.A.J.H.; Proudfoot, A.T.; Boyd, S.G.; Campbell, I.W.; Brown, N.S.; Gordon, A. 1984 British Medical Journal 289:225				

Tissue	Cases Exposure Route	Range	Mean	General Information
10572 Blood, plasma	32 Injection	a) 4-20 uU/ml b) 6-50 uU/ml c) 33-39 uU/ml d) 14-28 uU/ml e) 66-130 uU/ml f) 26-66 uU/ml g) 1388-1472 uU/ml h) 1000-1041 uU/ml i) 15-28 uU/ml j) 17-18 uU/ml k) 28-144 uU/ml l) 22-91 uU/ml m) 25-45 uU/ml n) 20-35 uU/ml	a) 12+/-1 uU/ml b) 17+/-2 uU/ml c) 35+/-1 uU/ml d) 21+/-3 uU/ml e) 90+/-8 uU/ml f) 43+/-6 uU/ml g) 1430+/-42 uU/ml h) 1021+/-21 uU/ml i) Not given j) Not given k) Not given l) Not given m) Not given n) Not given	a) Artery, no drug, fasting, 19 cases b) Hepatic vein c) Artery, 0.25 mU/min/kg IV, 4 cases d) Hepatic vein e) Artery, 1.02 mU/min/kg IV, 7 cases f) Hepatic vein g) Artery, 9.94 mU/min/kg IV, 2 cases h) Hepatic vein i) Artery, before and 10 min after 0.28 mU/min/kg IV, hyperglycemic, 4 cases j) Hepatic vein k) Artery, before and 15 min after 1 mU/min/kg, euglycemic, 5 cases l) Renal vein m) Artery, before and 15 min after induced hyperglycemia, 4 cases n) Renal vein c-h) at equilibrium, last 20 min of 2 hr infusion, euglycemic hyperinsulinemia. i)-n) ranges of means. Estimated from graphs. i)-j) somatostatin, 500 ug/hr IV. Healthy non-diabetic adults, 19-39 yr, 52-96 kg, body surface area 1.55-2.20 sq m RIA
BLOOD PLASMA; DELIBERATE EXPOSURE; ADOLESCENTS; ADULTS; DRUGS; BIOLOGICAL MONITORING; METABOLISM Ferrannini, E.; Wahren, J.; Faber, O.K.; Felig, P.; Binder, C.; DeFronzo, R.A. 1983 American Journal of Physiology 244 (Endocrinology and Metabolism 7):E517-E527				

Insulin
9004-10-8
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Tissue	Cases Exposure Route	Range	Mean	General Information
10574 Blood, serum	8 Injection	a) 5-22 mU/l b) 7-22 mU/l c) 6-18 mU/l d) 7-20 mU/l S.E.	a) Not given b) Not given c) Not given d) Not given	a) 0 and 45 min, with 10 U neutral insulin (Velosulin, Nordisk) SC at 2.5 min, not smoking b) Smoking two cigarettes (filter tipped, 0.9 mg nicotine ea) beginning at 0 and 7.5 min c) 0 and 120 min, with 16 U Mixtard insulin (Nordisk, 30% neutral and 70% isophane) SC at 2.5 min, not smoking d) Smoking, as in b) Ranges of means. Crossover study. C peptide and blood glucose levels also showed no acute smoking effect. Estimated from figure. Healthy 20-30 yr old habitual smokers, normal wt
BLOOD SERUM; DELIBERATE EXPOSURE; DRUGS; HORMONES; SMOKING Muhlhauser, I.; Cuppers, H.J.; Berger, M. 1984 British Medical Journal 288:1875-1876				

Interferon
9008-11-1
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Tissue	Cases Exposure Route	Range	Mean	General Information
10575 Blood, plasma	18 Injection	a) 4000-25 pg/ml b) 180-100 pg/ml c) 80-100 pg/ml	a) Not applicable b) Not applicable c) Not applicable	a) 0-24 hr, peak (13,900+/-3,570 pg/ml) immediately following IV injection of 36X10(E+6) U for 40 min b) 0-24 hr, peak (2,020+/-352 pg/ml) at 3.8 hr following IM injection of 36X10(E+6) U into gluteus muscle c) 0-24 hr, peak (1730+/-477 pg/ml) at 7.3 hr following SC injection of 36X10(E+6) U into forearm. IV route caused few adverse reactions. IM and subcutaneous injections resulted in more prevalent and longer side reactions. Healthy volunteers, 19-36 yr old, 58-82 kg wt Chills, headache, myalgias, malaise, nausea, diaphoresis, syncope ELISA
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; ANTITUMOR AGENTS; DRUG THERAPY; DRUGS; BIOLOGICAL MONITORING Wills, R.J.; Dennis, S.; Spiegel, H.E.; Gibson, D.M.; Nadler, P.I. 1984 Clinical Pharmacology and Therapeutics 35(5):722-727				

Tissue	Cases Exposure Route	Range	Mean	General Information
10576 Blood, serum	10 Injection	a) 780-88 units/ml b) 500-110 units/ml c) 110-9 units/ml d) 65-9 units/ml	a) Not given b) Not given c) Not given d) Not given	a) 4-24 hr, 60 million units b) 2-24 hr (390 units/ml at 8 hr), 30 million units c) 8-24 hr (88 units/ml at 2 hr), 10 million units d) 4-24 hr, 3 million units Ranges of means, estimated from graph. Doses IM. Mean of d 1 and 22. Other dose levels given. Patients with metastatic carcinoma, 23-65 yr Increased beta2-microglobulin in serum and urine RIA
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; DRUGS; ANTITUMOR AGENTS; PROTEINS; BIOLOGICAL MONITORING; URINE; NEOPLASMS Sumpio, B.E.; Ernstoff, M.S.; Kirkwood, J.M. 1984 Cancer Research 44:3599-3603				

Interferon
9008-11-1
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Tissue	Cases Exposure Route	Range	Mean	General Information
10577 Blood, serum	82 Injection	a) Not applicable b) 13,000-140 units/ml c) 2200-115 units/ml d) Not given e) Not given f) Not given g) Not given h) Not given	a) <20 units/ml b) Not given c) Not given d) 160 units/ml e) 26 units/ml f) 32 units/ml g) 55 units/ml h) 45 units/ml	a) 1.5x10(E+5)-9.6x10(E+6) units IM, 0-24 hr, 9 cases b) 54x10(E+6) units IV bolus, 5-180 min, 5 cases c) 36x10(E+6) units IV bolus, 5-120 min, 5 cases d) 5 min, 8 cases e) 30 min f) 2 hr g) 3 hr h) 6 hr d-h) after start of 6 hr infusion, 4 million units/hr. Levels in a) were below detection limits. 1 patient achieved complete regression in 3 nodules, 2 patients partial regression. b)-c) ranges of means. Patients, 22-66 yr, with advanced metastatic cancer Fever, headache, myalgia, chills, fatigue, anorexia, nausea, diarrhea Granulocytopenia, increased beta-2-microglobulin Bioassay

BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; ANTITUMOR AGENTS; DRUGS; DRUG THERAPY; CHEMOTHERAPY; BIOLOGICAL MONITORING; BIOAVAILABILITY
Gutterman, J.U.; Rosenblum, M.G.; Rios, A.; Fritsche, H.A.; Quesada, J.R. 1984 Cancer Research 44:4164-4171

Tissue	Cases Exposure Route	Range	Mean	General Information
10578 Urine	10 Injection	a) Not given b) Not given c) Not given d) Not given	a) <5 IU/ml b) <5 IU/ml c) <5 IU/ml d) <5 IU/ml	a) 50 million units b) 30 million units c) 10 million units d) 3 million units 0-24 hr, IM doses, measured d 1 and 22. Other dose levels given. Patients with metastatic carcinoma, 23-65 yr Increased beta2-microglobulin in serum and urine RIA

BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; DRUGS; ANTITUMOR AGENTS; PROTEINS; BIOLOGICAL MONITORING; URINE; NEOPLASMS
Sumpio, B.E.; Ernstoff, M.S.; Kirkwood, J.M. 1984 Cancer Research 44:3599-3603

Iodine

7553-56-2

I

AtW 126.9045, MP 113.60 C, BP 185.24 C, VP (solid) 0.03 mm Hg at 0 C, 0.305 mm Hg at 25 C, 2.154 mm Hg at 50 C, 26.78 mm Hg at 90 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10570 Blood, serum	a) 41 b) 41 c) 17 d) 18 Dermal	a) 5.0-187.0 ug/dl b) 12.5-175.0 ug/dl c) 5.5-15.5 ug/dl d) 6.6-17.4 ug/dl	a) Not given b) Not given c) Not given d) Not given	a) Mothers at delivery, perinatal exposure to povidone-iodine as germicide b) Exposed infants c) Nonexposed mothers d) Nonexposed infants Range of means. 5-30 hr exposures. Berlin, Federal Republic of Germany Altered thyroid gland function Chem
10580 Urine	a) 41 b) 41 c) 17 d) 18 Dermal	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 600 ug/dl b) 12.2 ug/dl c) 5.3 ug/dl d) 4.1 ug/dl e) 175 ug/dl f) 32.5 ug/dl g) 3.8 ug/dl h) 2.7 ug/dl	a) Mothers, day 1 b) Mothers, day 5 c) Controls, mothers, day 1 d) Controls, mothers, day 5 e) Infants, day 1 f) Infants, day 5 g) Controls, infants, day 1 h) Controls, infants, day 5 Days after deliveries in which povidone-iodine was used as topical germicide, 5-30 hr exposures. Berlin, Federal Republic of Germany Altered thyroid gland function Chem

GERMICIDES; IODINE; ADULTS; NEWBORN; BLOOD SERUM; THYROID GLANDS; URINE; COMPARATIVE EVALUATIONS; DRUGS; DELIBERATE EXPOSURE

l'Allemand, D.; Gruters, A.; Heidemann, P.; Schurnbrand, P. 1983 Journal of Pediatrics 102(6):935-938

Iron

7439-89-6

Fe

AtW 55.847, MP 1535 C (pure), 1000-1300 C (cast), 1500 C (wrought), 1300 C (steel), BP 3000 C, VP 1 mm Hg at 1787 C, 10 mm Hg at 2040 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10581 Blood	6 Ingestion	Not given	12+/-1.5% Geometric mean	Absorption into hemoglobin 15 d after drinking 5 mg as Fe(III)-EDTA labeled with Fe-59. Volunteers Scintillation counting

BLOOD; URINE; DELIBERATE EXPOSURE; DRUGS; IRON; CHELATING AGENTS; DIETS; FOOD ADDITIVES; METABOLISM; MINERAL METABOLISM

Candela, E.; Camacho, M.V.; Martinez-Torres, C.; Perdomo, J.; Mazzarri, G.; Acurero, G.; Layrisse, M. 1984 Journal of Nutrition 114:2204-2211

Iron
7439-89-6
Fe
AtW 55.847, MP 1535 C (pure), 1000-1300 C (cast), 1500 C (wrought), 1300 C (steel), BP 3000 C, VP 1 mm Hg at 1787 C, 10 mm Hg at 2040 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10582 Blood, plasma	8 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 133+/-26 ug/dl b) 137+/-10 ug/dl c) 92.5+/-25 ug/dl d) 119+/-29 ug/dl e) 111.5+/-27 ug/dl f) 93+/-28 ug/dl g) 72+/-26 ug/dl h) 90+/-27 ug/dl	a) At start of study b) Same as a), with folic acid c) End of low Zn diet plus 4 mg/d d) Same as b), with folic acid e) End of low Zn diet f) Same as e), with folic acid g) End of low Zn diet plus 30 mg/d h) Same as g), with folic acid b) , c), e), f), and h) 400 ug folic acid every other day. Healthy male volunteers, 19-58 yr old, in Zn-deficiency studies between 1979 and 1981. In closely supervised metabolic unit, carefully controlled diets. AAS
URINE; BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; COMPARATIVE EVALUATIONS; VITAMINS; ZINC; COPPER; IRON Milne, D.B.; Canfield, W.K.; Mahalko, J.R.; Sandstead, H.H. 1984 American Journal of Clinical Nutrition 39:535-539				

Tissue	Cases Exposure Route	Range	Mean	General Information
10583 Urine	6 Ingestion	Not given	0.3-1.3% Geometric mean	Absorption and elimination over 48 hr after drinking 5 mg as Fe(III)-EDTA labeled with Fe-59. Volunteers Scintillation counting
BLOOD; URINE; DELIBERATE EXPOSURE; DRUGS; IRON; CHELATING AGENTS; DIETS; FOOD ADDITIVES; METABOLISM; MINERAL METABOLISM Candela, E.; Camacho, M.V.; Martinez-Torres, C.; Perdomo, J.; Mazzarri, G.; Acurero, G.; Layrisse, M. 1984 Journal of Nutrition 114:2204-2211				

Tissue	Cases Exposure Route	Range	Mean	General Information
10584 Urine	8 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.07+/-0.02 mg/d b) 0.08+/-0.06 mg/d c) 0.07+/-0.01 mg/d d) 0.07+/-0.02 mg/d e) 0.07+/-0.02 mg/d f) 0.07+/-0.02 mg/d	a) Low Zn diet plus 4 mg Zn/d, 42 d b) Low Zn diet c) Low Zn diet plus 30 mg Zn/d, 126 d d) Same as a), plus folic acid e) Same as b), plus folic acid, 24 d f) Same as c), plus folic acid d) -f) 400 ug folic acid every other day. Healthy male volunteers, 19-58 yr old, in Zn-deficiency studies between 1979 and 1981. In closely supervised metabolic unit, carefully controlled diets. AAS
URINE; BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; COMPARATIVE EVALUATIONS; VITAMINS; ZINC; COPPER; IRON Milne, D.B.; Canfield, W.K.; Mahalko, J.R.; Sandstead, H.H. 1984 American Journal of Clinical Nutrition 39:535-539				

Isonipecotic acid, 1-methyl-4-phenyl-, ethyl ester (8 CI); 4-Piperidinecarboxylic acid, 1-methyl-4-phenyl-, ethyl ester (9 CI)
57-42-1
C15-H21-N-O2
MW 247.35, MP 186-189 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10585 Blood	8	a) 9.0-14 mg/l b) 1.5-30 mg/l	a) Not given b) Not given	a) Coroner's cases which tested positive for opiates b) Normeperidine metabolite, 2 cases New assay. Autopsies LC
BLOOD; DELIBERATE EXPOSURE; AUTOPSIES; NARCOTICS; DRUG ABUSE; DRUGS; FORENSIC MEDICINE; BIOACCUMULATION				
Hepler, B.R.; Sutheimer, C.; Sunshine, I.; Sebrosky, G. 1984 Journal of Analytical Toxicology 8:78-80				

Tissue	Cases Exposure Route	Range	Mean	General Information
10588 Blood	a) 2 b) 19 c) 1	a) 4.2-17.6 mg/l b) 0.1-2.8 mg/l c) Not applicable	a) 10.9 mg/l b) 1.0 mg/l c) 0.2 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related death, 1979-1980. Autopsy, Maryland State Medical Examiners office. Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS				
Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Tissue	Cases Exposure Route	Range	Mean	General Information
10587 Blood, plasma	a) 10 b) 7 c) 6 d) 5 Injection	a) 100-292 ng/ml b) 68-716 ng/ml c) 38-396 ng/ml d) 83-514 ng/ml	a) 159+/-19 ng/ml b) 431+/-108 ng/ml c) 202+/-67 ng/ml d) 227+/-78 ng/ml S.E.	a) Dose 150 ug/kg IV, healthy volunteers b) Anuric patients c) Patients with moderate renal function d) Patients with near normal renal function % plasma protein binding significantly different for volunteers (mean 58.2+/-5.0%) and for all patients together (mean 39.8+/-2.0%). 26-32 yr old healthy volunteers and 22-69 yr old patients with varying degrees of renal disfunction, United Kingdom GLC
BLOOD PLASMA; DELIBERATE EXPOSURE; UNITED KINGDOM; KIDNEY DISEASES; ANALGESICS; DRUGS; NARCOTICS; MEPERIDINES; METABOLISM				
Chan, K.; Tse, J.; Jennings, F.; Orme, M.L'E. 1983 Journal of Pharmacy and Pharmacology 35:[illegible]4P				

Isopropyl alcohol (8 CI); 2-Propanol (9 CI)
67-63-0
C3-H8-O
MW 60.09, MP -88.5 to -89.5 C,BP 80.3 C, VP 10 mm Hg at 2.4 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10588 Blood	a) 5 b) 1	a) 0.02-0.26% b) Not applicable	a) 0.14% b) 0.04%	Single-drug deaths, 1975-1980 b) Non-drug related death, 1975-1980. Autopsy, Maryland State Medical Examiners office. Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Isosorbide 2-mononitrate (No postings in CHEMLINE).

Tissue	Cases Exposure Route	Range	Mean	General Information
10589 Blood, plasma	6 Injection Ingestion	a) 450-40 ng/ml b) 137-8 ng/ml	a) Not given b) Not given	a) 0.5-6 hr, 5 mg IV b) 0.5-6 hr, 20 mg oral Ranges of means, estimated from graphs. Healthy adults, 28-33 yr, 54-75 kg GC-EC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; NITRATES; METABOLITES; BIOAVAILABILITY Strachi, P.; Galeazzi, R.L.; Soliva, M. 1984 Clinical Pharmacology and Therapeutics 36(4):485-492				

Tissue	Cases Exposure Route	Range	Mean	General Information
10590 Blood, plasma	8 Ingestion	297.8-4.4 ng/ml	Not applicable	0.17-12 hr, peak (409.1 ng/ml) at 20 min after 20 mg. Healthy volunteers, 4 males, 4 females, 20-45 yr old GC
BLOOD PLASMA; DELIBERATE EXPOSURE; GERMANY; ADULTS; DRUGS; DRUG THERAPY; BIOACCUMULATION; METABOLISM; METABOLITES Laufen, H.; Aumann, M.; Leitold, M. 1983 Arzneimittel-Forschung/Drug Research 33(11):980-984				

L-Ascorbic acid
50-81-7
C6-H8-O6
MW 176.12, MP 190-192 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10591 Blood, serum	118 Ingestion	a) Not given b) Not given c) Not given	a) 61.11+/-16.70 umol/L b) 67.50+/-19.50 umol/L c) 85.48+/-33.70 umol/L	a) 75 controls b) 38 with attention deficit disorder (ADD) prior to study c) After 12 wk of increasing doses from 1.0-3.0 g/d Significant difference b), c) $p<0.05$. 9.04+/-1.87 yr old controls,(30 females, 36 males, 33.58+/-8.96 kg, IQ 116.07+/-11.7). 9.31+/-1.99 yr olds with ADD, 6 females, 35, males, 30.78+/-11.02 kg, IQ 101.33+/-11.38 Nausea, anorexia, gagging and abdominal pain
BLOOD SERUM; DELIBERATE EXPOSURE; CANADA; CHILDREN; BEHAVIOR DISORDERS; VITAMINS; VITAMIN C; DRUGS Haslam, R.H.A.; Dalby, J.T.; Rademaker, A.W. 1984 Pediatrics 74(1):103-111				

L-Glutamic acid, N-(4-((2-(2-amino-1,4,5,6,7,8-hexahydro-5-methyl-4-oxo-6-pteridinyl)ethyl)amino) bensoyl)-
52190-22-2
C21-H27-N7-O6

Tissue	Cases Exposure Route	Range	Mean	General Information
10592 Blood, plasma	a) 2 b) 4 Injection	a) 40-2 ug/ml b) 5-0.15 ug/ml	a) Not applicable b) Not applicable	a) 0-96 hrs, peak (40 ug/ml) immediately after 150 mg/sq m b) 0-96 hrs, peak (5 ug/ml) immediately after 16 mg/sq m. Patients with cancer Scintillation counting; HPLC
10593 Cerebrospinal fluid	1 Injection	0.1-0.09 ug/ml	Not applicable	0-48 hrs, peak (0.03 ug/ml) from 6-24 hrs after 150 mg/sq m. Patients with cancer Scintillation counting; HPLC
10594 Urine	6 Injection	50-88%	69+/-5%	% dose recovery in 96 hr. 24 hr recovery was 68%. Drug thought to be sequestered in tissues. Frequent administration should be monitored for toxic effects. Patients with cancer Scintillation counting; HPLC
BLOOD PLASMA; CEREBROSPINAL FLUID; URINE; DELIBERATE EXPOSURE; ADULTS; CARCINOMAS; NEOPLASMS; ANTITUMOR AGENTS; DRUGS; DRUG THERAPY; CHEMOTHERAPY; BIOACCUMULATION; RADIONUCLIDES Loo, T.L.; Jiushi, L.; Lu, K.; Savaraj, N. 1983 Cancer Research 43:921-924				

L-Proline, 1-(N-(1-(ethoxycarbonyl)-3-phenylpropyl)-L-alanyl)-, (S)-
75847-73-3
C20-H28-N2-O5

Tissue	Cases Exposure Route	Range	Mean	General Information
10595 Blood, serum	12 Ingestion	a) 15-1 ng/ml b) 80-1 ng/ml	a) Not applicable b) Not applicable	a) 0-48 hr, peak (150 ng/ml) at 3 hr. Subjects fed before 40 mg dose b) 0-48 hr , peak (147 ng/ml) at 3 hr. Subjects fasted before 40 mg dose Dose as enalapril maleate Active metabolite enalaprilat measured. Presence of food did not affect bioavailability. Healthy, normotensive adults 23-37 yr old. RIA
10596 Urine	12 Ingestion	a) 200-125 ug/h b) 200-140 ug/h	a) Not applicable b) Not applicable	a) 0-18 hr, peak (1000 ug/h) at 3 hr. Subjects fed before 40 mg dose b) 0-18 hr, peak (1000 ug/h) at 3 hr. Subjects fasted before 40 mg dose Dose as enalapril maleate. Active metabolite enalaprilat measured. Presence of food had no effect on excretion. Health, normotensive adults 23-37 yr old. RIA
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ADULTS; HYPERTENSION; ANTIHYPERTENSIVE AGENTS; DRUGS; BIOACCUMULATION; BIOAVAILABILITY Swanson, B.N.; Vlasses, P.H.; Ferguson, R.K.; Bergquist, P.A.; Till, J.D.; Irvin, J.D.; Harris, K. 1984 Journal of Pharmaceutical Sciences 73(11):1655-1657				

L-Proline, 1-(3-mercapto-2-methyl-1-oxopropyl)-, (S)-
62571-86-2
C9-H15-N-O3-S
MW 217.31

Tissue	Cases Exposure Route	Range	Mean	General Information
10597 Blood	1 Ingestion	a) Not applicable b) Not applicable c) Not applicable	a) 20 ng/ml b) 12 ng/ml c) Undetectable	a) Peripheral venous b) Uterine venous c) Umbilical cord Dose, 50 mg 3X/d taken prior to and continued through pregnancy. Elective Cesarean (fetal distress) 36 wk, 2.13 kg girl, no obvious signs of disease or malformation. Last dose 13 hr before delivery. Levels in infant very low. 47 yr old pregnant woman with hypertension
BLOOD SERUM; DELIBERATE EXPOSURE; CONSUMER EXPOSURE; ADULTS; HYPERTENSION; DRUGS; ANTIHYPERTENSIVE AGENTS; PREGNANCY Piocchi, R.; Lijnen, P.; Fagard, R.; Staessen, J.; Amery, A.; Van Assche, P.; Spits, B.; Rademaker, M. 1984 Lancet II(8412):1153				

Tissue	Cases Exposure Route	Range	Mean	General Information
10598 Blood, plasma	9 Ingestion	780+/-230-70+/-10 ng/ml	Not given	0.5 and 24 hr after single 100 mg dose. Peak 2960+/-390 ng/ml at 1.5 hr. New measurement method. Healthy subjects GC; MS
BLOOD; DELIBERATE EXPOSURE; ANTIHYPERTENSIVE AGENTS; MEASUREMENT METHODS; DRUGS Ivashkiv, E.; McKinstry, D.N.; Cohen, A.I. 1984 Journal of Pharmaceutical Sciences 73(8):1113-1117				

L-Proline, 1-(3-mercapto-2-methyl-1-oxopropyl)-, (S)-
62571-86-2
C9-H15-N-O3-S
MW 217.31

Tissue	Cases Exposure Route	Range	Mean	General Information
10599 Blood, plasma	7 Ingestion	0.3+/-0.2-1.0+/-10.4 ng/ml	Not applicable	0-24 hr, peak (72.4+/-25.0 ng/ml) at 1 hr. Dosage 100 mg Range of means. Measured as S-methyl metabolite. Healthy subjects GC/MS
BLOOD; PLASMA; DELIBERATE EXPOSURE; CARDIOVASCULAR DISEASES; HYPERTENSION; DRUG THERAPY; ANTIHYPERTENSIVE AGENTS; BLOOD PRESSURE; BIOLOGICAL MONITORING; METABOLITES Cohen, A.I.; Ivashkiv, E.; McCormick, T.; McKinstry, D.N. 1984 Journal of Pharmaceutical Sciences 73(10):1493-1495				

Tissue	Cases Exposure Route	Range	Mean	General Information
10600 Blood, whole	9 Ingestion	550+/-100-1+/-0.3 ng/ml	Not given	0.5 and 16 hr after single 100 mg dose. Peak 900+/-140 ng/ml at 1 hr. New measurement method. Healthy subjects GC; MS
BLOOD; DELIBERATE EXPOSURE; ANTIHYPERTENSIVE AGENTS; MEASUREMENT METHODS; DRUGS Ivashkiv, E.; McKinstry, D.N.; Cohen, A.I. 1984 Journal of Pharmaceutical Sciences 73(8):1113-1117				

Tissue	Cases Exposure Route	Range	Mean	General Information
10601 Urine	8	a) Not given b) Not given c) Not given	a) 18.3+/-4.2% b) 3.06+/-1.26% c) 0.97+/-0.16% % of dose	a) Excretion in 0-6 hr, 6 patients b) Excretion of metabolite capotril disulfide dimer in 0-6 hr, 8 patients c) Excretion of metabolite S-methyl capotril in 0-6 hr, 5 patients Dose in all groups: 50 or 100 mg. New assay. Patients with hypertension, 53-60 yr old. GC/MS
URINE; DELIBERATE EXPOSURE; ADULTS; AUSTRALIA; HYPERTENSION; ANTIHYPERTENSIVE AGENTS; DRUGS Drummer, O.H.; Jarrott, B.; Louis, W.J. 1984 Journal of Chromatography 305:83-93				

L-threo-D-galacto-Octopyranoside, methyl 7-chloro-6,7,8-trideoxy-6-(1-methyl-4-propyl-L-2-pyrrolidinecarboxamido)-1-thio- , trans- alpha- (8 CI) L-threo-alpha-D-galacto-Octopyranoside, methyl 7-chloro-6,7,8-trideoxy-6-(((1-methyl-4-propyl-2-pyrrolidinyl)carbonyl)amino)-1- thio-, (2S-trans)- (9 CI)

18323-44-9
C18-H33-Cl-N2-O6-S
MW 424.96, MP Hydrochloride hydrate 141-143 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10602 Blood, serum	9 Injection	a) Not given b) Not given	a) 11.1+/-0.9 ug/ml b) 10.5+/-0.8 ug/ml	a) 600 mg clindamycin b) Same dose plus 1 g azotreonam Maxima after 30 min infusion. Healthy subjects, caucasian, average age 24 yrs, ht 178 cm, wt 74 kg Microbiological
10603 Urine	9 Injection	a) Not given b) Not given	a) 13.7+/-0.8% b) 15.2+/-0.6%	a) 600 mg clindamycin b) Same dose plus 1 g azotreonam, ($P<0.05$) % of dose excreted in 24 hr. Healthy subjects, caucasian, average age 24 yrs, ht 178 cm, wt 74 kg Microbiological

BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ANTIBIOTICS; COMPARATIVE EVALUATIONS; DRUG INTERACTION; DRUGS

Creasey, W.A.; Adamovics, J.; Dhruv, R.; Plat, T.B.; Sugerman, A.A. 1984 Journal of Clinical Pharmacology 24:174-180

L-threo-D-galacto-Octopyranoside, methyl 7-chloro-6,7,8-trideoxy-6-(1-methyl-4-propyl-L-2-pyrrolidinecarboxamido)-1-thio- , 2-(dihydrogen phosphate), trans- alpha- (8 CI); L-threo-alpha-D-galacto-Octopyranoside, methyl 7-chloro-6,7,8-trideoxy-6-(((1-methyl-4-propyl-2-pyrrolidinyl)carbonyl)amino)-1- thio- 2-(dihydrogen phosphate), (2S-trans)- (9 CI)

24729-96-2
C18-H34-Cl-N2-O8-P-S

Tissue	Cases Exposure Route	Range	Mean	General Information
10604 Blood, serum	40 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 10.92 ug/ml b) 10.45 ug/ml c) 12.69 ug/ml d) 5.52 ug/ml e) 2.80 ug/ml f) 3.03 ug/ml	a) Premature, <28 d old, peak b) Full-term, <28 d old, peak c) Full-term, >28 d old, peak d) Premature, <28 d old, trough e) Full-term, <28 d old, trough f) Full-term, >28 d old, trough Dose, 20 mg/kg IV. Younger infants had decreased clearance. Recommends reduced dosage. Infant patients at risk from peritoneal contamination Well diffusion

BLOOD SERUM; DELIBERATE EXPOSURE; PREMATURE INFANTS; INFANTS; INFECTION; ANTIBIOTICS; BIOACCUMULATION; DRUGS; DRUG THERAPY

Bell, M.J.; Shackelford, P.; Smith, R.; Schroeder, K. 1984 Journal of Pediatrics 105(3):482-486

Lithium
7439-93-2
Li
AtW 6.941, MP 180.54 C, BP 1336 C, VP 1 mm Hg at 723 C, 10 mm Hg at 890 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10605 Blood	1	Not applicable	10.5 mEq/l	Single-drug death, 1975-1980. Autopsy, Maryland State Medical Examiners office. Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:226-230				

Tissue	Cases Exposure Route	Range	Mean	General Information
10606 Blood, plasma	Ingestion	a) Not given b) Not given c) 1.5-2.5 mEq/L d) 2.5-3.5 mEq/L e) Not given	a) <=1.5 mEq/L b) <=1.5 mEq/L c) Not given d) Not given e) >=3.5 mEq/L	a) Chronic b) Subacute or pretoxic c) Acute mild, grade 1 d) Acute moderate, grade 2 e) Acute severe, grade 3 Values are approximate with considerable overlap. 4 hr hemodialysis reduces levels an average of 1 mEq/L. Patients with overdoses Many, including nervous system and gastrointestinal symptoms, nephritis, and goite.
BLOOD PLASMA; DELIBERATE EXPOSURE; HYPERTHYROIDISM; NEUROLOGIC MANIFESTATIONS; DRUGS; PSYCHOTROPIC DRUGS; DRUG ABUSE; ANTIDEPRESSIVE AGENTS; LAVAGE; HEMODIALYSIS; LITHIUM; POISONING El-Mallakh, R.S. 1984 Veterinary and Human Toxicology 26(1):31-35				

Tissue	Cases Exposure Route	Range	Mean	General Information
10607 Blood, serum	1 Ingestion	0.6-0.9 mEq/l	Not given	During about 6 months, while experiencing neurotoxic drug reactions Maintenance therapy of 300 mg 2X/d as carbonate and 75 mg/d desipramine hydrochloride. Recovery after discontinuation of Li. 58 yr old patient with bipolar affective disorder Dysarthria, ataxia, abnormal EEG, impaired cognitive function
BLOOD SERUM; DELIBERATE EXPOSURE; CASE HISTORIES; NERVOUS SYSTEM DISEASES; NEUROLOGIC MANIFESTATIONS; ANTIDEPRESSIVE AGENTS; DRUG THERAPY; DRUGS; LITHIUM; ACCIDENTAL POISONING Lewis, D.A. 1983 Journal of the American Medical Association 250(15):2029-2030				

Luteinising hormone-releasing factor

9034-40-6
C55-H75-N17-O13
MW 1182.32

Tissue	Cases Exposure Route	Range	Mean	General Information
10608 Blood, plasma	8 Injection	200-260 pg/mL	Not given	Peaks, 4 min after each 1 ug IV dose given at 96 min intervals, undetectable at 0 and 12 min, 1 patient Doses given by portable autoinfusion pump for a total of 23 monthly cycles, resulting in seven pregnancies, four healthy deliveries. Ovulation achieved in all patients. Patients with hypothalamic amenorrhea and related infertility, refractory to treatment with clomiphene citrate and to human menopausal gonadotropin, with relatively low basal hormone levels RIA
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; HORMONES; DRUGS; DRUG THERAPY; PREGNANCY Miller, D.S.; Reid, R.R.; Cetel, N.S.; Rebar, R.W.; Yen, S.S.C. 1983 Journal of the American Medical Association 250(2):2937-2941				

Tissue	Cases Exposure Route	Range	Mean	General Information
10609 Blood, serum	15 Injection	a) 2-2 IU/l b) 3-3 IU/l	a) Not given b) Not given	a) 6 mo of therapy, peak 6 IU/l at 2 hr b) 12 mo of therapy, peak 7 IU/l at 2-3 hr 0 and 24 hr after dose. 250 ug, 2x/d for one week, 250 ug/d for indicated time. Testosterone levels given. Prostatic cancer patients
BLOOD SERUM; DELIBERATE EXPOSURE; CARCINOMAS; DRUGS; DRUG THERAPY; HORMONES Kerle, D.; Williams, G.; Ware, H.; Bloom, S.R. 1984 British Medical Journal 289(6443):468-469				

Magnesium

7439-95-4
Mg
AtW 24.305, MP 651 C, BP 1100 C, VP 1 mm Hg at 621 C, 10 mm Hg at 740 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10610 Blood, serum	2	a) Not given b) Not given	a) 1.5 mg/dl b) 1.7 mg/dl	a) Mother, at delivery b) Umbilical cord During pregnancy and lactation took 1 g Ca, vitamin and mineral supplement (400 IU vitamin D, 350 mg Ca), and 100,000 IU vitamin D/d. Healthy infant. Her 27 yr old mother with familial multiple endocrine adenomatosis (10 yr duration)
BLOOD SERUM; MILK; DELIBERATE EXPOSURE; ADULTS; INFANTS; CALCIUM; MAGNESIUM; VITAMIN D; LACTATION; METABOLITES; DRUGS Greer, F.R.; Hollis, B.W.; Napoli, J.L. 1984 Journal of Pediatrics 105(1):61-64				

Magnesium
7439-95-4
Mg
AtW 24.305, MP 651 C, BP 1100 C, VP 1 mm Hg at 621 C, 10 mm Hg at 740 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10611 Blood, serum	23 Injection	a) 5.2-6.2 mg/dl b) 5.1-5.9 mg/dl c) 4-5 mg/dl d) 6.4+/-1.0-6.8+/-1.0 mg/dl e) 4.6+/-0.2-6.4+/-0.8 mg/dl f) 4.1+/-0.8-4.8+/-0.5 mg/dl	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) After 4 gm IV dose, 14 patients b) IV dose, 1 gm/dl/hr for 20 hr, 7 of a) c) IV dose, 2 gm/dl/hr for 20 hr, other 7 of a) d) 0-8 hr, 2 doses: 4 gm IV followed by 10 gm IM, 8 patients e) 8-12 hr, 5 gm every 4 hr IM f) 0-12 hr, 2 doses: 10 gm IM followed by 5 gm IM every 4 hr. 10 patients Significant difference between IV and IM regimen for 1st 8 hr but not beyond. 16-25 yr old preeclamptic patients, 34-40 wk pregnant, Memphis, TN AAS
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; ANTICONVULSANTS; COMPARATIVE EVALUATIONS; MAGNESIUM; PREGNANCY Sibai, B.M.; Graham, J.M.; McCubbin, J.H. 1984 American Journal of Obstetrics and Gynecology 150(6):728-733				

Tissue	Cases Exposure Route	Range	Mean	General Information
10612 Blood, serum	7 Injection	a) Not given b) Not given c) Not given	a) 2.0+/-0.3 mg/dL b) 6.1+/-0.4 mg/dL c) 4.9+/-0.2 mg/dL S.E.	a) Pretreatment b) End of 1st dose c) 2.5 hr later 2 doses: 6 g over 30 min followed by 2 g/hr. Normal levels in pregnancy 1.8-2.4 mg/dL. Associated decline in parathyroid hormone levels: 18.1+/-25-7.8+/-0.7 pg/ml. After 180 min, levels returned to 12.7+/-2.4 pg/ml. 28+/-2 yr olds in premature labor (mean gestation 27+/-1 wk) with no other pregnancy complications AAS
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; CALCIUM; MAGNESIUM; PREGNANCY Cholst, I.N.; Steinberg, S.F.; Tropper, P.J.; Fox, H.E.; Segre, G.V.; Bilezikian, J.P. 1984 New England Journal of Medicine 310(19):1221-1225				

Tissue	Cases Exposure Route	Range	Mean	General Information
10613 Blood, serum	10 Injection	a) 0.60-0.65 mmol/l b) Not given c) Not given d) Not given	a) Not given b) 0.78+/-0.08 mmol/l c) 0.54+/-0.08 mmol/l d) 0.56+/-0.16 mmol/l	a) At time of seizure, cyclosporin (CyA) therapy for 4-34 (mean 12) d, 7 cases b) Before CyA therapy, 3 cases c) CyA therapy for 27-100 d, same 3 cases with neurological symptoms d) After 48-56 mmol Mg and symptom resolution, same 3 cases No correlation between CyA and Mg levels. Initial CyA dose 3 mg/kg/d IV or 12.5 mg/kg/d orally. Dose adjusted to maintain trough of 200-400 ng/ml. 18-35 yr old bone-marrow transplant recepients, 12/81-3/84, Fred Hutchinson Cancer Research Center, Seattle, WA Colorimetry
BLOOD SERUM; DELIBERATE EXPOSURE; ADOLESCENTS; ADULTS; MAGNESIUM; IMMUNOSUPPRESSANTS; DRUGS; DRUG THERAPY; DRUG INTERACTION Thompson, C.B.; June, C.H.; Sullivan, K.M.; Thomas, E.D. 1984 Lancet 2(8412):1116-1120				

Magnesium
7439-95-4
Mg
AtW 24.305, MP 651 C, BP 1100 C, VP 1 mm Hg at 621 C, 10 mm Hg at 740 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10616 Milk	1	Not given	2.96 mg/dl	14 d lactation. Breast-fed for 35 d. Mother took 1 gm Ca, vitamin/mineral supplement (400 IU vitamin D, 350 mg Ca) and 100,000 IU vitamin D/d. 27 yr old mother with familial multiple endocrine adenomatosis (10 yr duration)
BLOOD SERUM; MILK; DELIBERATE EXPOSURE; ADULTS; INFANTS; CALCIUM; MAGNESIUM; VITAMIN D; LACTATION; METABOLITES; DRUGS Greer, F.R.; Hollis, B.W.; Napoli, J.L. 1984 Journal of Pediatrics 105(1):61-64				

Tissue	Cases Exposure Route	Range	Mean	General Information
10615 Urine	5 Ingestion	62-152.7 mg/d	97.7+/-30.3 mg/d	16 of 35 samples collected daily for 7 d. Mg intake, mean, 339.6+/-105.4/d. Protein (animal, plant, total) intakes also reported. Positive relationship between dietary and urinary Mg, reversed when animal protein is increased. 18-30 yr old healthy moderately active Caucasians AAS
URINE; DELIBERATE EXPOSURE; COMPARATIVE EVALUATIONS; MAGNESIUM; DIETS; FOODS; DRUGS Shier, N.W.; Myers, M.A. 1984 Nutrition Reports International 29(6):1301-1306				

Malonamic acid, N-(2-carboxy-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo(3.2.0)hept-6-yl)-2-phenyl- (8 CI) (VAN) 4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 6-((carboxyphenylacetyl)amino)-3,3-dimethyl-7-oxo-, (2S-(2alpha,5alpha,6beta))- (9 CI)
4697-36-3
C17-H18-N2-O6-S
MW 378.42

Tissue	Cases Exposure Route	Range	Mean	General Information
10616 Blood, serum	6 Injection	84-268 ug/ml	170.7+/-24.5 ug/ml	7.5 g IV/6 hr, discontinued when template bleeding time >15 min. Healthy 22-35 yr old volunteers Markedly prolonged template bleeding times (>21 min) in 5 cases. Bioassay
BLOOD SERUM; DELIBERATE EXPOSURE; DISEASES; ANTIBIOTICS; ANTICOAGULANTS; DRUGS Ballard, J.O.; Barnes, S.G.; Sattler, F.R. 1984 Antimicrobial Agents and Chemotherapy 25(2):153-156				

Malonamide, 2-ethyl-2-phenyl- (8 CI); Propanediamide, 2-ethyl-2-phenyl- (9 CI)
7206-76-0
C11-H14-N2-O2
MW 206.27

Tissue	Cases Exposure Route	Range	Mean	General Information
10617 Blood, serum	6 Injection Ingestion	a) 22-10 umol/L b) 92-10 umol/L	a) Not applicable b) Not applicable	a) Oral, peak 55.4+/-10.2 umol/L at 0.5-4 hr b) IV 0.5 and 48 hr after 500 mg dose. Ranges of means, estimated from graph. Oral bioavailability 86.4-95.9%. Healthy volunteers, 21-44 yr, 47.5-90 kg GLC

BLOOD SERUM; DELIBERATE EXPOSURE; ANTICONVULSANTS; CENTRAL NERVOUS SYSTEM DISEASES; PHENYLETHYLMALONAMIDE; METABOLITES; BIOAVAILABILITY; DRUGS
Pisani, P.; Richens, A. 1983 Clinical Pharmacokinetics 8:272-276

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10618 Blood	1 Ingestion	168.0-18.2 ug/dl	Not applicable	Days 4-88 of hospitalization after 1 mo of ear irrigations with a total of 1.6 L of merthiolate containing 1.4 g/L of borate and 1 g/L Hg 18 mo old white female. Ear irrigations and subsequent swallowing of merthiolate draining through tympanostomy tubes Symptoms of Hg/borate toxicity included staring spells, ataxia, unprovoked screaming/opisthotonic posturing, tremor, incoordination, vomiting, nystagmus, scaled skin, coma, renal and hepatic failure, hypertension, congestive heart failure. Died 3 mo post-admission EEG abnormal, acidosis, dehydration, hyperglycemia AAS

BLOOD; BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ANTISEPTIC; DRUGS; DRUG THERAPY; CASE HISTORIES
Robyans, J.; Watson, P.D.; Wood, G.A.; MacDonald, W.A. 1984 Journal of Pediatrics 104(2):311-313

Tissue	Cases Exposure Route	Range	Mean	General Information
10619 Blood	1	Not applicable	a) 2750 ug/L b) 4000 ug/L	a) Second post-operative day b) At necropsy Normal level 15 ug/L. Ovarian tumor ruptured during removal. Peritoneal lavage with 500 ml 1/500 HgCl2 Thoroughly removed after 5 min. Cites 10 toxic reactions including 5 deaths related to peritoneal lavage. 53 yr old cancer surgery patient Ascites, anuria, pulmonary edema, respiratory distress syndrome. Morphological changes in lungs, kidneys, colon, and peritoneal cavity. Histological confirmation of respiratory distress syndrome, necrotising colitis and acute renal tubular necrosis.

BLOOD; HEART; KIDNEYS; LUNGS; LIVER; DELIBERATE EXPOSURE; CASE HISTORIES; METAL POISONING; NEOPLASMS; LAVAGE; MERCURY; POTASSIUM
Laundy, T.; Adam, A.E.; Kershaw, J.B.; Rainford, D.J. 1984 British Medical Journal 289:96-98

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10630 Blood	1	Not applicable	12 ug/dl	Single-drug death, 1975-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Tissue	Cases Exposure Route	Range	Mean	General Information
10631 Blood, serum	1	a) Not given b) Not given c) Not given	a) 3.9 umol/L b) 9 umol/L c) 0.6 umol/L	After peritoneal irrigation with 0.2% Hg-chloride during surgery 64 yr old carcinoma patient, hemicolectomy Abdominal pain, nausea, metallic taste, hypotension, wound disruption, renal failure Proteinuria, oliguria, exudative peritonitis Chem
OMENTUM; CASE HISTORIES; AUSTRALIA; MERCURY; ADULTS; BLOOD SERUM; HEMODIALYSIS; SURGERY; DELIBERATE EXPOSURE; DRUGS; DRUG THERAPY Lai, K-N.; Pugsley, D.J.; Black, R.B. 1983 Medical Journal of Australia 1:37-38				

Tissue	Cases Exposure Route	Range	Mean	General Information
10632 Heart	1	Not applicable	3400 ug/L	At necropsy. Normal level 200 ug/L. Ovarian tumor ruptured during removal. Peritoneal lavage with 500 ml 1/500 HgCl2. Thoroughly removed after 5 min. Cites 10 toxic reactions including 5 deaths related to peritoneal lavage. 53 yr old cancer surgery patient Ascites, anuria, pulmonary edema, respiratory distress syndrome. Morphological changes in lungs, kidneys, colon, and peritoneal cavity. Histological confirmation of respiratory distress syndrome, necrotising colitis and acute renal tubular necrosis.
10633 Kidney	1	Not applicable	53,000 ug/L	At necropsy. Normal level 1100 ug/L. Ovarian tumor ruptured during removal. Peritoneal lavage with 500 ml 1/500 HgCl2. Thoroughly removed after 5 min. Cites 10 toxic reactions including 5 deaths related to peritoneal lavage. Serum urea level, 31.5 mmol/L. Serum creatinine, 690 umol/L. 53 yr old cancer surgery patient Ascites, anuria, pulmonary edema, respiratory distress syndrome. Morphological changes in lungs, kidneys, colon, and peritoneal cavity. Histological confirmation of respiratory distress syndrome, necrotising colitis and acute renal tubular necrosis.

(next page)

Mercury
7439-97-6
Hg
AtW 200.59, MP -38.87 C, BP 356.72 C, VP 2X10(E-3) mm Hg at 25 C, 100 mm Hg at 260 C

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
10024 Liver	1	Not applicable	30,000 ug/L	At necropsy. Normal level 800 ug/L. Ovarian tumor ruptured during removal. Peritoneal lavage with 500 ml 1/500 HgCl2. Thoroughly removed after 5 min. Cites 10 toxic reactions including 5 deaths related to peritoneal lavage. 53 yr old cancer surgery patient Ascites, anuria, pulmonary edema, respiratory distress syndrome. Morphological changes in lungs, kidneys, colon, and peritoneal cavity. Histological confirmation of respiratory distress syndrome, necrotising colitis and acute renal tubular necrosis
10035 Lung	1	Not applicable	5500 ug/L	At necropsy. Normal level 280 ug/L. Ovarian tumor ruptured during removal. Peritoneal lavage with 500 ml 1/500 HgCl2. Thoroughly removed after 5 min. Cites 10 toxic reactions including 5 deaths related to peritoneal lavage. 53 yr old cancer surgery patient Ascites, anuria, pulmonary edema, respiratory distress syndrome. Morphological changes in lungs, kidneys, colon, and peritoneal cavity. Histological confirmation of respiratory distress syndrome, necrotising colitis and acute renal tubular necrosis.
BLOOD; HEART; KIDNEYS; LUNGS; LIVER; DELIBERATE EXPOSURE; CASE HISTORIES; METAL POISONING; NEOPLASMS; LAVAGE; MERCURY; POTASSIUM Laundy, T.; Adam, A.E.; Kershaw, J.B.; Rainford, D.J. 1984 British Medical Journal 288:96-98				

Tissue	Cases Exposure Route	Range	Mean	General Information
10030 Urine	1 Ingestion	198->854 ug	Not given	Days 4-94 (peak on day 58) of hospitalization after 1 mo of ear irrigations with a total of 1.4 L of merthiolate containing 1.4 g/L of borate and 1 g/L Hg 18 mo old white female. Ear irrigations and subsequent swallowing of merthiolate draining through tympanostomy tubes Symptoms of Hg/borate toxicity included staring spells, ataxia, unprovoked screaming/opisthotonic posturing, tremor, incoordination, vomiting, nystagmus, scaled skin, coma, renal and hepatic failure, hypertension, congestive heart failure. Died 3 mo post-admission EEG abnormal, acidosis, dehydration, hyperglycemia AAS
BLOOD; BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ANTISEPTIC; DRUGS; DRUG THERAPY; CASE HISTORIES Rehyans, J.; Walson, P.D.; Wood, G.A.; MacDonald, W.A. 1984 Journal of Pediatrics 104(2):311-313				

Methanesulfonamide, N-(4-(9-acridinylamino)-3-methoxyphenyl)-
51264-14-3
C21-H19-N3-O3-S

Tissue	Cases Exposure Route	Range	Mean	General Information
10627 Bile	2 Injection	a) 0.5-1.6% b) 8.5-23.7%	a) 1.0% b) 16.0%	a) Parent compound b) Total C-14 % 6 mg/sq m excreted in 72 hr. Patients with disseminated cancer Liquid scintillation
10628 Blood, plasma	a) 1 b) 1 c) 1 Injection	a) 0.1-0.005 ug/ml b) 0.05-0.02 ug/ml c) 0.05-0.005 ug/ml	a) Not applicable b) Not applicable c) Not applicable	a) Normal organ function, 0-24 hr, peak (0.1 ug/ml) b) Severe liver dysfunction, 0-24 hr, peak (0.05 ug/ml) c) Marked renal dysfunction, 0-24 hr, peak (0.05 ug/ml) After 6 mg/sq m. Patients with disseminated cancer Liquid scintillation
10629 Cerebrospinal fluid	3 Injection	a) Not given b) Not given c) Not given	a) 0.01 ug/ml b) 0.006 ug/ml c) 0.001 ug/ml	a) 3.75 hr after 40 mg/sq m b) 5.75 hr after 40 mg/sq m c) 57.50 hr after 6 mg/sq m. Patients with disseminated cancer Liquid scintillation
10630 Urine	a) 4 b) 4 c) 6 d) 2 e) 1 f) 5 g) 6 h) 2 i) 1 Injection	a) Not given b) Not given c) Not given d) 1.0-3.8% e) Not given f) Not given g) Not given h) 2.3-16.5% i) Not given	a) 11.9+/-2.8% b) 12.6+/-1.4% c) 19.8+/-1.4% d) 2.4% e) 2.3% f) 55.1+/-5.5% g) 45.9+/-4.9% h) 9.4% i) 13.4%	a) Normal organ function (NOF) b) Mild liver dysfunction (MLD) c) Severe liver dysfunction (SLD) d) Renal dysfunction (RD) e) Liver and renal dysfunction (LRD) f) Total C-14, NOF g) Total C-14, SLD h) Total C-14, RD i) Total C-14, LRD % 6 mg/sq m excreted in 72 hr. Patients with disseminated cancer Liquid scintillation

BLOOD PLASMA; URINE; BILE; CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; LIVER DISEASES; KIDNEY DISEASES; ANTITUMOR AGENTS; DRUGS; DRUG THERAPY; BIOACCUMULATION; ANTIBIOTICS; NEOPLASMS

Hall, S.W.; Friedman, J.; Legha, S.S.; Benjamin, R.S.; Gutterman, J.U.; Loo, T.L. 1983 Cancer Research 43:3422-3426

Methanesulfonic acid, (antipyrinylmethylamino)-, sodium salt, monohydrate (8 CI); Methanesulfonic acid, ((2,3-dihydro-1,5-dimethyl-3-oxo-2-phenyl-1H-pyrazol-4-yl)methylamino)-, sodium salt, monohydrate (9 CI)
5907-38-0
C13-H17-N3-O4-S.H2-O.Na
MW 351.35

Tissue	Cases Exposure Route	Range	Mean	General Information
10681 Blood, plasma	1 Ingestion	a) 7 ug/ml-0.13 ug/ml b) 2.0 ug/ml-0.25 ug/ml c) 1.4 ug/ml-0.15 ug/ml d) 1.8 ug/ml-0.1 ug/ml	a) Not given b) Not given c) Not given d) Not given	a) 4-methylaminoantipyrine, at 2 and 24 hr, 5.5 ug/ml at 1 hr b) 4-aminoantipyrine, at 4 and 24 hr, 0.6 ug/ml at 1 hr c) 4-formylaminoantipyrine at 4 and 48 hr, 0.8 ug/ml at 1 hr d) 4-acetylaminoantipyrine at 24 and 1 hr, 0.8 ug/ml at 48 hr After single 1.0 g dose. Estimated from graph. Healthy volunteer, 29 yr, 100 kg HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; ANALGESICS; ANTIPYRETICS; MEASUREMENT METHODS; DRUGS; METABOLITES; METABOLISM Katz, E.E.; Granit, L. 1984 Journal of Chromatography 305:477-484				

Methanol
67-56-1
C-H4-O
MW 32.04, MP -97.8 C, BP 64.7 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10682 Blood	a) 8 b) 1 c) 1	a) 0.25-0.55% b) Not applicable c) Not applicable	a) 0.38% b) 0.13% c) 0.18%	a) Single-drug deaths, 1975-1980 b) Non-drug death, 1975-1980 c) Multiple-drug related death, 1975-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooke, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Tissue	Cases Exposure Route	Range	Mean	General Information
10683 Blood, whole	34 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given	a) <0.35 mg b) 0.80+/-0.10 mg c) 1.02+/-0.26 mg d) 0.3+/-0.1 mg e) 0.5+/-0.2 mg /100 ml	a) 34 mg/kg dose, 0-150 min, 10 cases b) 50 mg/kg, peak, at 30-90 min, 6 cases c) 100 mg/kg, peak, at 90 min, 8 cases d) 50 mg/kg, at 2.5 hr e) 100 mg/kg, at 2.5 hr All samples in a) below detection limits. d) and e) estimated from graph. Dose as aspartame, methanol released during metabolism. Normal infants, 6-14 mo, 9.23+/-1.26 kg GC
BLOOD; DELIBERATE EXPOSURE; INFANTS; CHILDREN; METHANOL; FOOD ADDITIVES; SWEETENING AGENTS; DRUGS Stegink, L.D.; Brummel, M.C.; Filer, L.J., Jr.; Baker, G.L. 1983 Journal of Nutrition 113:1600-1606				

Methanone, (2-butyl-3-benzofuranyl)(4-(2-(diethylamino)ethoxy)-3,5-diiodophenyl)-
1951-26-8
C25-H29-I2-N-O3
MW 645.32

Tissue	Cases Exposure Route	Range	Mean	General Information
10634 Blood, cells	69	a) 0.11+/-0.04-0.44+/-0.17 ug/ml b) 0.10+/-0.05-0.88+/-0.28 ug/ml c) 0.45+/-0.20-1.20+/-0.35 ug/ml d) 0.33+/-0.16-1.75+/-0.45 ug/ml e) 1.66+/-1.02-0.55+/-0.41 ug/ml f) 3.81+/-2.58-2.43+/-2.14 ug/ml	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) Day 2 and 10 of treatment with 400 mg 2X/d, 6 cases b) Metabolite, desethylamiodarone, d 2 and 15 c) Day 2 and 15 of treatment with 800 mg 2X/d, 8 cases d) Desethylamiodarone, same treatment e) During treatment with 600 or 200 mg/d for at least 3 mo, 55 cases f) Desethylamiodarone Ranges of means, in red cells. Ratio of metabolite to parent drug increases with duration of treatment. Patients treated for ventricular tachycardia or fibrillation Skin discoloration developed in some cases, beginning at 17 mo drug treatment Pulmonary toxicity in 8 patients HPLC
10635 Blood, plasma	69	a) 0.60+/-0.26-1.66+/-0.41 ug/ml b) 0.13+/-0.10-0.78+/-0.23 ug/ml c) 1.46+/-0.50-2.73+/-0.93 ug/ml d) 0.36+/-0.14-1.40+/-0.66 ug/ml e) 3.78+/-1.61-1.45+/-0.50 ug/ml f) 2.02+/-1.40-1.38+/-0.74 ug/ml	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) Day 2 and 15 of treatment with 400 mg 2X/d, 6 cases b) Metabolite, desethylamiodarone, same treatment c) Day 2 and 15 of treatment with 800 mg 2X/d, 8 cases d) Desethylamiodarone e) During treatment with 600 or 200 mg/d for at least 3 mo, 55 cases f) Desethylamiodarone Ranges of means. a) through d) measured before morning dose. Ratio of metabolite to parent drug increases with duration of treatment. Patients treated for ventricular tachycardia or fibrillation Skin discoloration developed in some cases, beginning at 17 mo drug treatment Pulmonary toxicity in 8 patients HPLC

ERYTHROCYTES; BLOOD PLASMA; DELIBERATE EXPOSURE; HEART DISEASES; ANTIARRHYTHMIC AGENTS; DRUGS; COMPARATIVE EVALUATIONS; METABOLITES; DRUG THERAPY

Heger, J.J.; Prystowsky, E.N.; Zipes, D.P. 1983 American Heart Journal 106(4, part 2):831-835

Tissue	Cases Exposure Route	Range	Mean	General Information
10636 Blood, plasma	1	a) 5.0 mg/l b) 4.0 mg/l	a) Not applicable b) Not applicable	a) Level after 400-600 mg/d for 10 mo b) Metabolite, desethyl amiodarone Drug then withdrawn. (Toxicity may have been partly due to simultaneous doxepin treatment). 68 yr old heart disease patient Vomiting, muscle wasting. Death 5 mo after stopping drug Sensory neuropathy, hepatomegaly, cirrhosis, abnormal liver function

BLOOD PLASMA; DELIBERATE EXPOSURE; UNITED KINGDOM; AUTOPSIES; CASE HISTORIES; HEART DISEASES; LIVER DISEASES; NEUROLOGIC MANIFESTATIONS; ANTIARRHYTHMIC AGENTS; DRUGS; BIOPSIES; ACCIDENTAL POISONING; HEALTH HAZARDS

Lim, P.K.; Trewby, P.N.; Storey, G.C.A.; Holt, D.W. 1984 British Medical Journal 288:1638-1639

Methanone, (2-butyl-3-benzofuranyl)(4-(2-(diethylamino)ethoxy)-3,5-diiodophenyl)-
1951-26-8
C25-H29-I2-N-O3
MW 645.32

Tissue	Cases Exposure Route	Range	Mean	General Information
10627 Blood, serum	14 Ingestion	0.65-5.69+/-0.79 umol/l	2.48 umol/l	Steady state, 2-9 mg/kg/d. High correlation ($p<0.001$) with dose. Adverse reactions often accompany levels in excess of 4 umol/l. Therapeutic level of 1.5-4 umol/l recommended. Patients taking therapeutic doses of parent drug, 24-84 yr old, 3 females, 11 males Skin reactions, thyroid disorders, polyarthritis, myalgia, muscular weakness, bilateral pleural effusions Corneal deposits, hepatic enzyme abnormalities HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; CARDIOVASCULAR DISEASES; ANTIARRHYTHMIC AGENTS; DRUGS; DRUG THERAPY; BIOACCUMULATION Staubli, M.; Bircher, J.; Galeazzi, R.L.; Remund, H.; Studer, H. 1985 European Journal of Clinical Pharmacology 24:485-494				

Tissue	Cases Exposure Route	Range	Mean	General Information
10628 Blood, whole	1 Ingestion	a) 1.05-0.05 ug/ml b) 0.5-0.15 ug/ml	a) Not given b) Not given	a) 15 hr and 5.5 d after 8 g b) Metabolite, desethyl amiodarone, 15 hr and 10.5 d Hospitalized at 12 hr, for 13 d intensive follow-up. Weekly controls for 3 mo, with no clinical side effects found. Estimated from figure. 20 yr old attempted suicide victim Slight bradycardia day 2-3 HPLC
BLOOD; DELIBERATE EXPOSURE; CASE HISTORIES; ANTIARRHYTHMIC AGENTS; DRUG ABUSE; DRUGS; METABOLITES Bonati, M.; D'Arrano, V.; Galletti, F.; Fortunati, M.T.; Tognoni, G. 1985 Journal of Toxicology-Clinical Toxicology 20(2):181-186				

Methyldopa, pivaloyloxyethyl ester (No postings in CHEMLINE).

Tissue	Cases Exposure Route	Range	Mean	General Information
10629 Blood, plasma	4 Ingestion	a) 1-2.5 ug/ml b) 2-2.5 ug/ml	a) Not applicable b) Not applicable	a) Methyldopa metabolite, 0.5-4 hr, peak (6 ug/ml) at 1 hr after 1000 mg oral [H-3]-parent compound b) Methyldopa metabolite, 0.5-4 hr, peak (6 ug/ml) at 1 hr after 1000 mg oral [C-14]-parent compound. Healthy volunteers, 18-45 yr old Spectrofluorometry

(next page)

Methyldopa, pivaloyloxyethyl ester (No postings in CHEMLINE).

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
10640 Urine	4 Ingestion	a) 189-249 mg b) 39.8-89.0 mg c) 169-229 mg d) 59.6-81.4 mg	a) 223 mg b) 63 mg c) 201 mg d) 70 mg	a) Methyldopa metabolite, 0-7 d total after 1000 mg oral [H-3]-parent b) Methyldopa sulfate metabolite, 0-7 d total after 1000 mg oral [H-3] c) Methyldopa metabolite, 0-7 d total after 1000 mg oral [C-14]-parent d) Methyldopa sulfate metabolite, 0-7 d total after 1000 mg oral [C-14] Effective way to administer. Healthy volunteers, 18-45 yr old Spectrofluorometry
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; HYPERTENSION; ANTIHYPERTENSIVE AGENTS; DRUG INTERACTION; BIOACCUMULATION; METABOLISM; METABOLITES; DRUGS Vickers, S.; Duncan, C.A.H.; Ramjit, H.G.; Dobrinska, M.R.; Dollery, C.T.; Gomes, H.J.; Leidy, H.L.; Vincek, W.C. 1984 Drug Metabolism and Disposition 12(2):242-246				

Mitomycin
1404-00-8
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Tissue	Cases Exposure Route	Range	Mean	General Information
10641 Blood, plasma	1 Injection	a) 1.1-0.1 ug/ml b) 0.4-0.01 ug/ml	a) Not applicable b) Not applicable	a) 0-60 min, peak (1.1 ug/ml) after 10 mg/sq m, systemic circulation b) 0-60 min, peak (0.4 ug/ml) after 10 mg/sq m and 90X10(E+6) degradable starch microspheres (DSM) DSM reversably blocked hepatic arterial circulation, allowing enhanced local concentration at capillary level. Patient with incurable liver tumor HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; LIVER DISEASES; CARCINOMAS; GASTROINTESTINAL DISEASES; ANTITUMOR AGENTS; DRUG THERAPY; DRUGS; BIOACCUMULATION; TECHNETIUM; NEOPLASMS Gyves, J.W.; Ensminger, W.D.; VanHarken, D.; Niederhuber, J.; Stetson, P.; Walker, S. 1983 Clinical Pharmacology and Therapeutics 34(2):259-265				

Morphinan-3-ol, 17-methyl-
77-07-6
C17-H23-N-O
MW 257.38, MP 198-199 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10642 Blood	1	Not applicable	0.17 mg/l	Multiple-drug related death, 1979-1980. Autopsy, Maryland State Medical Examiners office. Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:228-230				

Morphinan-3-ol, 17-methyl-
77-07-6
C17-H23-N-O
MW 257.38, MP 106-109 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10643 Blood, plasma	12 Ingestion Injection	a) 10-0.4 ng/ml b) 8-3 ng/ml c) 15-0.6 ng/ml d) 3-20 ng/ml e) 7-100 ng/ml f) 96-4 ng/ml	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) At end of, and 24 hr after 2-5 mg IV. 2 cases b) Metabolite, levorphanol glucuronide, 3 and 24 hr after 2 mg IV. 1 case c) 1 hr after dose, and 44 hr after stopping, chronic, IM 2-6 mg doses. 4 cases d) 15 min and 1.5 hr after single 16 mg oral dose. 3.5 ng/ml at 24 hr. 1 case e) Levorphanol glucuronide, 15 min and 2 hr f) Pre-dose, and 60 hr after stopping, chronic oral 8-30 mg doses. 5 cases Half-life after injection about 10-11 hr. Some values estimated from figures. 20-60 yr old patients with advanced malignancies or chronic intractable pain RIA
10644 Cerebrospinal fluid	a) 1 b) 1 Injection	a) Not given b) 124-108 ng/ml	a) 2.9 ng/ml b) Not given	a) Averaged lumbar and ventricular, 16 hr after chronic IM 4 mg doses b) Ventricular and lumbar levels at steady state during chronic IM Similar to levels of unbound drug in plasma. 20-60 yr old patients with advanced malignancies or chronic intractable pain RIA
BLOOD PLASMA; CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; NEOPLASMS; CARCINOMAS; ANALGESICS; DRUG THERAPY; DRUGS; NARCOTICS; METABOLITES Dixon, R.; Crews, T.; Inturrisi, C.; Foley, K. 1983 Research Communications in Chemical Pathology and Pharmacology 41(1):3-17				

Morphinan-3,14-diol, 17-(cyclopropylmethyl)-4,5-epoxy-6-methylene-, (5alpha)-
55096-26-9
C21-H25-N-O3

Tissue	Cases Exposure Route	Range	Mean	General Information
10645 Blood, plasma	1 Ingestion	5-58 ng/ml	Not given	24 and 2 hr after single dose of 64 mg hydrochloride. 35 ng/ml at 0.5 hr (estimated from graph). HPLC
BLOOD PLASMA; MEASUREMENT METHODS; DELIBERATE EXPOSURE; DRUGS Hsiao, J.; Dixon, R. 1988 Research Communication in Chemical Pathology and Pharmacology 62(3):449-454				

Tissue	Cases Exposure Route	Range	Mean	General Information
10646 Blood, plasma	2 Ingestion Injection	a) 0-6 ng/ml b) 0-0.3 ng/ml	a) Not applicable b) Not applicable	a) 0-24 hr, peak 55 ng/ml at 1.5 hr. 64 mg oral dose b) 0-16 hr, peak 5 ng/ml at 10 min. 0.5 mg IV dose. RIA
BLOOD PLASMA; DELIBERATE EXPOSURE; NARCOTICS; DRUG INTERACTION; DRUGS Dixon, R.; Hsiao, J.; Taaffe, W.; Hahn, E.; Tuttle, R. 1984 Journal of Pharaceutical Sciences 73(11):1645-1646				

Morphinan-3,6alpha-diol, 7,8-didehydro-4,5alpha-epoxy-17-methyl- (8 CI); Morphinan-3,6-diol, 7,8-didehydro-4,5-epoxy-17-methyl-(5alpha,6alpha)- (9 CI)
57-27-2
C17-H19-N-O3
MW 285.33, MP 197 C (metastable phase), 254 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10647 Bile	1 Injection	Not applicable	0.12 mg/L	Autopsy data. Death ascribed to fentanyl. 33 yr old physician/officer, apparently self-injected with 'Sublimaze' (fentanyl) and 'Valium' (diazepam). GC/MS
SUICIDE; DRUGS; DRUG ABUSE; BLOOD; URINE; BILE; DELIBERATE EXPOSURE Garriott, J.C.; Rodrigues, R.; Di Maio, V.J.M. 1984 Journal of Analytical Toxicology 8:288-289				

Tissue	Cases Exposure Route	Range	Mean	General Information
10648 Bile	a) 220 b) 91 c) 46	a) Not given b) Not given c) Not given	a) 0.40 mg/100 ml b) 0.30 mg/100 ml c) 0.95 mg/100 ml	a) Heroin-related deaths b) Control group c) Morphine-positive control group Members of a) group died from heroin overdose, b) group from natural or traumatic causes but with either cutaneous stigmata of IV narcotic use or positive blood morphine levels, and c) group is the morphine-positive subset of b) group. Study found ethanol use and guinine content of injectable drug both associated with heroin overdose. Autopsies 1/80-12/82, 30 or 31 yr olds RIA
BLOOD; LUNGS; BILE; URINE; DELIBERATE EXPOSURE; ADULTS; DRUG ABUSE; NARCOTICS; AUTOPSIES; BIOACCUMULATION; HEALTH HAZARDS; DRUGS Ruttenber, A.J.; Luke, J.L. 1984 Science 226:14-20				

Tissue	Cases Exposure Route	Range	Mean	General Information
10649 Bile	13	0.05-9.00 mg/L	1.51 mg/L	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths RIA
VITREOUS HUMOR; BLOOD; BRAIN; LIVER; KIDNEYS; BILE; URINE; AUTOPSIES; NARCOTICS; DRUG ABUSE; SEDATIVES; FORENSIC MEDICINE; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; DRUGS; DELIBERATE EXPOSURE Ziminski, K.R.; Wemyss, C.T.; Bidanset, J.H.; Manning, T.J.; Lukash, L. 1984 Journal of Forensic Sciences 29(3):903-909				

Morphinan-3,6alpha-diol, 7,8-didehydro-4,5alpha-epoxy-17-methyl- (8 CI); Morphinan-3,6-diol, 7,8-didehydro-4,5-epoxy-17-methyl-(5alpha,6alpha)- (9 CI)
57-27-2
C17-H19-N-O3
MW 285.33, MP 197 C (metastable phase), 254 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10650 Blood	21	0.098-2.40 ug/g	Not given	Minimum fatal level, 0.2 ug/g, found in only 5 cases. None detected in non-related deaths. 17 suspected heroin related deaths, 4 non-related deaths, 1979-82. Detroit, Michigan GC-MS
BRAIN; BLOOD; URINE; DELIBERATE EXPOSURE; MICHIGAN; AUTOPSIES; DRUG ABUSE; DRUGS; NARCOTICS Pare, B.M.; Monforte, J.R.; Thibert, R.J. 1984 Journal of Analytical Toxicology 8:213-216				

Tissue	Cases Exposure Route	Range	Mean	General Information
10651 Blood	13	0.05-4.20 mg/L	1.15 mg/L	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths RIA
VITREOUS HUMOR; BLOOD; BRAIN; LIVER; KIDNEYS; BILE; URINE; AUTOPSIES; NARCOTICS; DRUG ABUSE; SEDATIVES; FORENSIC MEDICINE; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; DRUGS; DELIBERATE EXPOSURE Ziminski, K.R.; Wemyss, C.T.; Bidanset, J.H.; Manning, T.J.; Lukash, L. 1984 Journal of Forensic Sciences 29(3):903-909				

Tissue	Cases Exposure Route	Range	Mean	General Information
10652 Blood	14	a) 0.042-0.26 mg/l b) Not applicable	a) Not given b) 0.03 mg/l	a) 5 coroner's cases which tested positive for opiates. 9 cases were confirmed in bile only b) Hydromorphine, 1 case New assay. Autopsies LC
BLOOD; DELIBERATE EXPOSURE; AUTOPSIES; NARCOTICS; DRUG ABUSE; DRUGS; FORENSIC MEDICINE; BIOACCUMULATION Hepler, B.R.; Sutheimer, C.; Sunshine, I.; Sebrosky, G. 1984 Journal of Analytical Toxicology 8:78-90				

Morphinan-3,6alpha-diol, 7,8-didehydro-4,5alpha-epoxy-17-methyl- (8 CI); Morphinan-3,6-diol, 7,8-didehydro-4,5-epoxy-17-methyl-(5alpha,6alpha)- (9 CI)
57-27-2
C17-H19-N-O3
MW 285.33, MP 197 C (metastable phase), 254 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10653 Blood	a) 225 b) 115 c) 50	a) Not given b) Not given c) Not given	a) 0.03 mg/100 ml b) 0 mg/100 ml c) 0.01 mg/100 ml	a) Heroin-related deaths b) Control group c) Morphine-positive control group Members of a) group died from heroin overdose, b) group from natural or traumatic causes but with either cutaneous stigmata of IV narcotic use or positive blood morphine levels, and c) group is the morphine-positive subset of b) group. Study found ethanol use and guinine content of injectable drug both associated with heroin overdose. Autopsies 1/80-12/82, 30 or 31 yr olds RIA

BLOOD; LUNGS; BILE; URINE; DELIBERATE EXPOSURE; ADULTS; DRUG ABUSE; NARCOTICS; AUTOPSIES; BIOACCUMULATION; HEALTH HAZARDS; DRUGS
Ruttenber, A.J.; Luke, J.L. 1984 Science 226:14-20

Tissue	Cases Exposure Route	Range	Mean	General Information
10654 Blood	a) 1 b) 7 c) 3 d) 4 e) 1 f) 23 g) 32	a) Not applicable b) 30-195 ug/l c) 160-910 ug/l d) 160-1300 ug/l e) Not applicable f) 75-2300 ug/l g) 120-1200 ug/l	a) 410 ug/l b) 129 ug/l c) 437+/-412 ug/l d) 878+/-499 ug/l e) 180 ug/l f) 541+/-489 ug/l g) 472+/-283 ug/l	a) Single-drug death, 1975-1980 b) Non-drug deaths, 1975-1980 c) Multiple-drug related deaths, 1979-1980 d) 1977 narcotism deaths e) 1978 narcotism death f) 1979 narcotism deaths g) 1980 narcotism deaths. Autopsy, Maryland State Medical Examiner's office Death RIA

BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS
Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230

Tissue	Cases Exposure Route	Range	Mean	General Information
10655 Blood, plasma	a) 15 b) 14 Injection	a) 150-45 nmol/l b) 325-18 nmol/l /mg dose	a) Not given b) Not given	a) Transplant patients 5 and 180 min after dose b) Controls 1 and 180 min after dose 10 or 20 mg single dose. Estimated from graph. Dose-corrected levels higher in transplants beyond 30 min. Levels and kinetic parameters for individuals also given. Renal transplant patients and controls, lumbar laminectomy patients RIA

BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; TRANSPLANTS; SURGERY; ANALGESICS; DRUGS
Moore, A.; Sear, J.; Baldwin, D.; Allen, M.; Hunniset, A.; Bullingham, R.; McQuay, H. 1984 Clinical Pharmacology and Therapeutics 35(5):641-645

Morphinan-3,6alpha-diol, 7,8-didehydro-4,5alpha-epoxy-17-methyl- (8 CI); Morphinan-3,6-diol, 7,8-didehydro-4,5-epoxy-17-methyl-(5alpha,6alpha)- (9 CI)
57-27-2
C17-H19-N-O3
MW 285.33, MP 197 C (metastable phase), 254 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10656 Blood, plasma	a) 7 b) 7 c) 6 Injection	a) 19-2.4 ng/ml b) 29-1.2 ng/ml c) 34-2.5 ng/ml	a) Not given b) Not given c) Not given	a) 15 min-5 hr after epidural lumbar of 2 mg morphine hydrochloride b) After 4 mg c) After 6 mg Ranges of means, peak at 15 min. Rapid distribution, such that all levels <16 ng/ml after 1 hr. Analgesic duration increased with dosage and probably depends on locally high levels achieved. Respiratory rate tended to drop in c). Some values estimated from graphs. Thoracotomy patients, Sweden GC-EC
BLOOD PLASMA; CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; SWEDEN; PULMONARY DISEASES; ANALGESICS; DRUGS; NARCOTICS; SURGERY Nordberg, G; Hedner, T.; Mellstrand, T.; Dahlstrom, B. 1985 Anesthesiology 58(6):545-551				

Tissue	Cases Exposure Route	Range	Mean	General Information
10657 Blood, plasma	a) 7 b) 13 Injection	a) Not given b) Not given	a) 737+/-615 ng/ml b) 318+/-162 ng/ml	a) After 5 min infusion of 10 mg/70 kg, elderly subjects b) After 5 min infusion of 10 mg/70 kg, young subjects peaks. Elderly (5 males, 2 females, 60-69 yr old) and young (10 males, 3 females, 24-28 yr old) volunteers GC; HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; CANADA; ADULTS; ANALGESICS; DRUG THERAPY; AGE; DRUGS; NARCOTICS; BIOACCUMULATION Owen, J.A.; Sitar, D.S.; Berger, L.; Brownell, L.; Duke, P.C.; Mitenko, P.A. 1985 Clinical Pharmacology and Therapeutics 34(3):364-368				

Tissue	Cases Exposure Route	Range	Mean	General Information
10658 Blood, plasma	26 Injection	a) 90-8 ng/ml b) 48-5 ng/ml S.E.	a) Not given b) Not given	a) 15 min and 4 hr after IM, deltoid site. 35 ng/ml at 1 hr b) Gluteal, IM. 25 ng/ml at 1 hr Ranges of means. Crossover study, 8 and 16 mg (as sulphate) given one day apart (common administered dose of 10 mg). Values estimated from figure. Postoperative cancer patients, mean age 46-49, wt 76 kg RIA
BLOOD PLASMA; DELIBERATE EXPOSURE; NEOPLASMS; ANALGESICS; DRUG THERAPY; DRUGS; NARCOTICS; COMPARATIVE EVALUATIONS Grabinski, P.Y.; Kaiko, R.F.; Rogers, A.G.; Houde, R.W. 1983 Journal of Clinical Pharmacology 23:46-55				

Morphinan-3,6alpha-diol, 7,8-didehydro-4,5alpha-epoxy-17-methyl- (8 CI); Morphinan-3,6-diol, 7,8-didehydro-4,5-epoxy-17-methyl-(5alpha,6alpha)- (9 CI)
57-27-2
C17-H19-N-O3
MW 285.33, MP 197 C (metastable phase), 254 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10659 Blood, serum	1	a) Not applicable b) Not applicable	a) 100 ng/ml b) 54 ng/ml	a) 1 d after 5 mg given accidently b) 3 d after dose 13 hr after dose, given 0.02 mg naloxone, IV. 12 hr later, 0.4 mg naxolone, 1.5 hr later 0.4 mg naloxone. Then given constant infusion of 0.4 mg/hr for 5 d. Infant recovered with no effects. 3 d old male 2.44 kg
BLOOD SERUM; NEWBORN; DRUGS; ACCIDENTAL POISONING; CASE HISTORIES; DELIBERATE EXPOSURE Tenenbein, M. 1984 Journal of Pediatrics 105(4):645-648				

Tissue	Cases Exposure Route	Range	Mean	General Information
10660 Brain	21	a) Trace-0.75 ug/g b) Trace-0.55 ug/g c) 0.07-0.35 ug/g d) 0.15-0.45 ug/g e) 0.09-0.67 ug/g f) Negative-0.15 ug/g	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) Brain stem b) Cerebellum c) Cerebral cortex d) Hypothalamus e) Thalamus f) Not associated with overdose Sampled at autopsy. Morphine-3-glucuronide measured. Thalamus level indicative of blood level. 17 suspected heroin related deaths, 4 non-related deaths, 1979-82. Detroit, Michigan GC-MS
BRAIN; BLOOD; URINE; DELIBERATE EXPOSURE; MICHIGAN; AUTOPSIES; DRUG ABUSE; DRUGS; NARCOTICS Pare, E.M.; Monforte, J.R.; Thibert, R.J. 1984 Journal of Analytical Toxicology 8:213-216				

Tissue	Cases Exposure Route	Range	Mean	General Information
10661 Brain	13	0.05-1.00 mg/kg	0.39 mg/kg	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths RIA
VITREOUS HUMOR; BLOOD; BRAIN; LIVER; KIDNEYS; BILE; URINE; AUTOPSIES; NARCOTICS; DRUG ABUSE; SEDATIVES; FORENSIC MEDICINE; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; DRUGS; DELIBERATE EXPOSURE Zimiński, K.R.; Wemyss, G.T.; Bidanset, J.H.; Manning, T.J.; Lukash, L. 1984 Journal of Forensic Sciences 29(3):903-909				

Morphinan-3,6alpha-diol, 7,8-didehydro-4,5alpha-epoxy-17-methyl- (8 CI); Morphinan-3,6-diol, 7,8-didehydro-4,5-epoxy-17-methyl-(5alpha,6alpha)- (9 CI)
57-27-2
C17-H19-N-O3
MW 285.33, MP 197 C (metastable phase), 254 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10662 Cerebrospinal fluid	a) 7 b) 7 c) 6 Injection	a) 225-25 ng/ml b) 380-25 ng/ml c) 1100-40 ng/ml	a) Not given b) Not given c) Not given	a) 1 and 16 hr after epidural lumbar of 2 mg morphine hydrochloride. Mean peak 300 ng/ml at 3 hr b) 1 and 20 hr after 4 mg c) 1 and 16 hr after 6 mg Ranges of means. Gradual decline in 4 hr to 50% of peak values. Analgesic duration increased with dosage and probably depends on locally high levels achieved. Respiratory rate tended to drop in c). Values estimated from graphs. Thoracotomy patients, Sweden GC-EC
BLOOD PLASMA; CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; SWEDEN; PULMONARY DISEASES; ANALGESICS; DRUGS; NARCOTICS; SURGERY Nordberg, G; Hedner, T.; Mellstrand, T.; Dahlstrom, B. 1983 Anesthesiology 58(6):545-551				

Tissue	Cases Exposure Route	Range	Mean	General Information
10663 Kidney	13	0.10-7.00 mg/kg	1.78 mg/kg	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths RIA
10664 Liver	13	0.05-4.5 mg/kg	1.51 mg/kg	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths RIA
VITREOUS HUMOR; BLOOD; BRAIN; LIVER; KIDNEYS; BILE; URINE; AUTOPSIES; NARCOTICS; DRUG ABUSE; SEDATIVES; FORENSIC MEDICINE; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; DRUGS; DELIBERATE EXPOSURE Ziminski, K.R.; Wemyss, C.T.; Bidanset, J.H.; Manning, T.J.; Lukash, L. 1984 Journal of Forensic Sciences 29(3):903-909				

Tissue	Cases Exposure Route	Range	Mean	General Information
10665 Urine	1 Injection	Not applicable	0.12 mg/L	Autopsy data. Death ascribed to fentanyl. 33 yr old physician/officer, apparently self-injected with 'Sublimaze' (fentanyl) and 'Valium' (diazepam). GC/MS
SUICIDE; DRUGS; DRUG ABUSE; BLOOD; URINE; BILE; DELIBERATE EXPOSURE Garriott, J.C.; Rodrigues, R.; Di Maio, V.J.M. 1984 Journal of Analytical Toxicology 8:286-289				

Morphinan-3,6alpha-diol, 7,8-didehydro-4,5alpha-epoxy-17-methyl- (8 CI); Morphinan-3,6-diol, 7,8-didehydro-4,5-epoxy-17-methyl-(5alpha,6alpha)- (9 CI)
57-27-2
C17-H19-N-O3
MW 285.33, MP 197 C (metastable phase), 254 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10666 Urine	5 Ingestion	a) 0.421-6.29 mg/L b) Undetectable-0.717 mg/L	a) Not given b) Not given	a) 10 hr b) 56 hr After 30 mg codeine/4 hr for 5 doses. Ratio to codeine increases, surpassing parent drug at 20-40 hr. Similar elimination pattern with single dose of 30 mg. Improved assay procedure. Volunteers HPLC
URINE; DELIBERATE EXPOSURE; DRUGS; NARCOTICS; MEASUREMENT METHODS; METABOLITES Poecy, B.L.; Kimble, S.N. 1984 Journal of Analytical Toxicology 8:68-74				

Tissue	Cases Exposure Route	Range	Mean	General Information
10667 Urine	a) 180 b) 74 c) 35	a) Not given b) Not given c) Not given	a) 0.10 mg/100 ml b) 0.20 mg/100 ml c) 0.80 mg/100 ml	a) Heroin-related deaths b) Control group c) Morphine-positive control group Members of a) group died from heroin overdose, b) group from natural or traumatic causes but with either cutaneous stigmata of IV narcotic use or positive blood morphine levels, and c) group is the morphine-positive subset of b) group. Study found ethanol use and quinine content of injectable drug both associated with heroin overdose. Autopsies 1/80-12/82, 30 or 31 yr olds RIA
BLOOD; LUNGS; BILE; URINE; DELIBERATE EXPOSURE; ADULTS; DRUG ABUSE; NARCOTICS; AUTOPSIES; BIOACCUMULATION; HEALTH HAZARDS; DRUGS Ruttenber, A.J.; Luke, J.L. 1984 Science 226:14-20				

Tissue	Cases Exposure Route	Range	Mean	General Information
10668 Urine	6	11-156 mg/L	41 mg/L	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths RIA
10669 Vitreous humor	13	0.03-0.14 mg/L	0.07 mg/L	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths RIA
VITREOUS HUMOR; BLOOD; BRAIN; LIVER; KIDNEYS; BILE; URINE; AUTOPSIES; NARCOTICS; DRUG ABUSE; SEDATIVES; FORENSIC MEDICINE; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; DRUGS; DELIBERATE EXPOSURE Siminski, K.R.; Wemyss, C.T.; Bidanset, J.H.; Manning, T.J.; Lukash, L. 1984 Journal of Forensic Sciences 29(3):903-909				

Morphinan-3,6alpha,14-triol, 17-(cyclobutylmethyl)-4,5alpha-epoxy-, (8 CI); Morphinan-3,6,14-triol, 17-(cyclobutylmethyl)-4,5-epoxy-, (5alpha,6alpha)- (9 CI)
20594-33-6
C21-H27-N-O4

Tissue	Cases Exposure Route	Range	Mean	General Information
10670 Blood, plasma	1 Ingestion Injection	a) 100-0.35 ng/ml b) 0.5-0.20 ng/ml	a) Not applicable b) Not applicable	a) 0-15 hr, peak (100 ng/ml) at 5 min after IV dose of 10 mg b) 0-15 hr, peak (10 ng/ml) at 2.5 hr after oral dose of 45 mg Rapid, sensitive assay. Subject fasted 8 hr HPLC

BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; ANALGESICS; NARCOTICS; DRUG THERAPY; DRUGS; BIOACCUMULATION; BIOLOGICAL MONITORING
Lo, M.-W.; Jeergens, G.P.; Whitney, C.C., Jr. 1984 Research Communications in Chemical Pathology and Pharmacology 43(1):159-168

Morphinan-6-one, 17-(cyclopropylmethyl)-4,5alpha-epoxy-3,14-dihydroxy- (8 CI); Morphinan-6-one, 17-(cyclopropylmethyl)-4,5-epoxy-3,14-dihydroxy-, (5alpha)- (9 CI)
16590-41-3
C20-H25-N-O4
MW 343.44

Tissue	Cases Exposure Route	Range	Mean	General Information
10671 Blood, plasma	5 Injection Implantation	a) 7.9-34.2 ng/ml b) 0.26+/-0.09-0.41+/-0.12 ng/ml c) 0.41+/-0.14-1.00+/-0.29 ng/ml	a) Not given b) Not given c) Not given	a) Naltrexol (metabolite) maximum, within 1 hr after 10 mg IV b) Range of means for 28-32 d after SC implant c) Naltrexol, range of means for 28-32 d after implant Levels relatively constant over time period. Normal, healthy adults, 20-37 yr Local irritation, inflammation, and extrusion at implantation site GC/MS

BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; DRUGS; DRUG THERAPY; BIOAVAILABILITY
Chiang, C.N.; Hollister, L.E.; Kishimoto, A.; Barnett, G. 1984 Clinical Pharmacology and Therapeutics 36(5):704-708

Tissue	Cases Exposure Route	Range	Mean	General Information
10672 Blood, plasma	6 Injection	a) 16+/-8-7.8+/-2 ng Eq/ml b) 0.9+/-0.3 ng Eq/ml-trace c) 0.2+/-0.2 ng Eq/ml-trace d) 0.8+/-0.2-0.1+/-0.1 ng Eq/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) Total drug, peak 32+/-6 ng Eq/ml at 75 min b) Nonconjugated naltrexone, peak, 15+/-8 ng Eq/ml at 15 min c) Nonconjugated 2OH-3O-Me6-beta Naltrexol, peak, 0.6+/-0.4 ng Eq/ml at 8 hr d) Nonconjugated 6-beta naltrexol, peak, 4.5+/-0.5 ng Eq/ml at 75 min 5 min and 72 hr after 5 mg SC as hydrochloride. Ranges of mean. Healthy volunteers. Mean age, wt, and ht were 20.2 yr, 69.2 kg, and 1.81 m HPLC

BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; NARCOTICS; DRUG ABUSE; MEASUREMENT METHODS; BIOLOGICAL MONITORING; DRUGS
Wall, M.E.; Perez-Reyes, M.; Brine, D.R.; Cook, C.E. 1984 Drug Metabolism and Disposition 12(6):677-681

Morphinan-6-one, 17-(cyclopropylmethyl)-4,5alpha-epoxy-3,14-dihydroxy- (8 CI); Morphinan-6-one, 17-(cyclopropylmethyl)-4,5-epoxy-3,14-dihydroxy-, (5alpha)- (9 CI)
16590-41-3
C20-H23-N-O4
MW 341.44

Tissue	Cases Exposure Route	Range	Mean	General Information
10672 Urine	8 Injection Implantation	a) 20.5+/-9.9-31.6+/-14.2 ng/ml b) 70.9+/-40.0-200.9+/-116.6 ng/ml	a) Not given b) Not given	a) Naltrexone b) Naltrexol (metabolite) Range of means for 23-32 d after implant. Large variation in daily metabolite levels, 25-230 ng/ml, estimated from graph. Normal, healthy adults, 20-37 yr Local irritation, inflammation, and extrusion at implantation site GC/MS
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; DRUGS; DRUG THERAPY; BIOAVAILABILITY Chiang, C.N.; Hollister, L.E.; Kishimoto, A.; Barnett, G. 1984 Clinical Pharmacology and Therapeutics 36(5):704-708				

Tissue	Cases Exposure Route	Range	Mean	General Information
10674 Urine	6 Injection	a) 22+/-2% b) 22+/-2% c) 19+/-2% d) 10+/-5% e) 3+/-1.0%	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0-4 hr b) 4-12 hr c) 12-24 hr d) 24-48 hr e) 48-72 hr % of dose excreted as parent drug and 3 major metabolites after 5 mg SC as hydrochloride. Ranges of means. Healthy volunteers. Mean age, wt, and ht were 30.2 yr, 69.2 kg, and 1.81 m HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; NARCOTICS; DRUG ABUSE; MEASUREMENT METHODS; BIOLOGICAL MONITORING; DRUGS Wall, M.E.; Perez-Reyes, M.; Brine, D.R.; Cook, C.E. 1984 Drug Metabolism and Disposition 12(6):677-681				

Morphinan-6-one, 4,5alpha-epoxy-14-hydroxy-3-methoxy-17-methyl- (8 CI); Morphinan-6-one, 4,5-epoxy-14-hydroxy-3-methoxy-17-methyl-, (5alpha)- (9 CI)
76-42-6
C18-H21-N-O4
MW 315.36, MP 218-220 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10675 Blood	1 Ingestion	Not given	<0.1 ug/ml	Autopsy. Dose unknown. Combined levels of ethanol, methanol and isopranol <5 mg/dl. Data also for clomipramine, somepirac, caffeine, salicylates, acetaminophen, indomethacin, lorazepam. 57 yr old treated for depression, joint pain. Excessive drinking on occasion. Confusion, weakness, intoxication, death. Death due to clomipramine toxicity. TLC
AUTOPSIES; BEHAVIOR DISORDERS; NEUROLOGIC MANIFESTATIONS; BLOOD; URINE; ANTIDEPRESSIVE AGENTS; ANALGESICS; DRUGS; DRUG ABUSE; ALCOHOLS; METABOLITES; CASE HISTORIES; DELIBERATE EXPOSURE Weatherall, R.C.; Guay, D.R.P.; Chalmers, J.L.; Keenan, J.R. 1983 Journal of Analytical Toxicology 7:168-171				

Morphinan-6-one, 4,5alpha-epoxy-14-hydroxy-3-methoxy-17-methyl- (8 CI); Morphinan-6-one, 4,5-epoxy-14-hydroxy-3-methoxy-17-methyl-, (5alpha)- (9 CI)
76-42-6
C18-H21-N-O4
MW 315.36, MP 218-220 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10676 Blood	1	Not applicable	0.04 mg/l	Non-drug death, 1975-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooke, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Tissue	Cases Exposure Route	Range	Mean	General Information
10677 Urine	1 Ingestion	Not given	<0.1 ug/ml	Autopsy. Dose unknown. Combined levels of ethanol, methanol, isopropanol <5 mg/dl. Data also for clomipramine, somepirac, caffeine, salicylates, acetaminophen, indomethacin, lorazepam. 57 yr old treated for depression, joint pain. Excessive drinking on occasion. Confusion, weakness, intoxication, death. Death due to clomipramine toxicity. TLC
AUTOPSIES; BEHAVIOR DISORDERS; NEUROLOGIC MANIFESTATIONS; BLOOD; URINE; ANTIDEPRESSIVE AGENTS; ANALGESICS; DRUGS; DRUG ABUSE; ALCOHOLS; METABOLITES; CASE HISTORIES; DELIBERATE EXPOSURE Weatherall, R.C.; Guay, D.R.P.; Chalmers, J.L.; Keenan, J.R. 1983 Journal of Analytical Toxicology 7:168-171				

Morphinan-6-one, 4,5alpha-epoxy-3-hydroxy-17-methyl- (8 CI); Morphinan-6-one, 4,5-epoxy-3-hydroxy-17-methyl-, (5alpha)- (9 CI)
466-99-9
C17-H19-N-O3
MW 285.33, MP 266-267 C (crystals from ethanol)

Tissue	Cases Exposure Route	Range	Mean	General Information
10678 Blood	1	Not applicable	0.1 mg/L	Autopsy samples. No distinguishing abnormalities. Death attributed to respiratory and cardiovascular depression from combined effects of ethanol and hydromorphine. 29 yr old house painter (80 kg, 170 cm). History of hypertension, unspecified street drug use, episodic drinking. No gross evidence of drug use. GC/MS
10679 Brain	1	Not applicable	0.5 mg/kg	Autopsy samples. No distinguishing abnormalities. Death attributed to respiratory and cardiovascular depression from combined effects of ethanol and hydromorphine. 29 yr old house painter (80 kg, 170 cm). History of hypertension, unspecified street drug use, episodic drinking. No gross evidence of drug use. GC/MS

(next page)

Morphinan-6-one, 4,5alpha-epoxy-3-hydroxy-17-methyl- (8 CI); Morphinan-6-one, 4,5-epoxy-3-hydroxy-17-methyl-, (5alpha)- (9 CI)
466-99-9
C17-H19-N-O3
MW 285.33, MP 266-267 C (crystals from ethanol)

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
10680 Kidney	1	Not applicable	0.7 mg/kg	Autopsy samples. No distinguishing abnormalities. Death attributed to respiratory and cardiovascular depression from combined effects of ethanol and hydromorphine. 20 yr old house painter (80 kg, 170 cm). History of hypertension, unspecified street drug use, episodic drinking. No gross evidence of drug use. GC/MS
10681 Liver	1	Not applicable	0.8 mg/kg	Autopsy samples. No distinguishing abnormalities. Death attributed to respiratory and cardiovascular depression from combined effects of ethanol and hydromorphine. 20 yr old house painter (80 kg, 170 cm). History of hypertension, unspecified street drug use, episodic drinking. No gross evidence of drug use. GC/MS
10682 Urine	1	Not applicable	7.8 mg/L	Autopsy samples. No distinguishing abnormalities. Death attributed to respiratory and cardiovascular depression from combined effects of ethanol and hydromorphine. Hydrolysed before analysis. 20 yr old house painter (80 kg, 170 cm). History of hypertension, unspecified street drug use, episodic drinking. No gross evidence of drug use. GC/MS
10683 Vitreous humor	1	Not applicable	0.1 mg/L	Autopsy samples. No distinguishing abnormalities. Death attributed to respiratory and cardiovascular depression from combined effects of ethanol and hydromorphine. 20 yr old house painter (80 kg, 170 cm). History of hypertension, unspecified street drug use, episodic drinking. No gross evidence of drug use. GC/MS

DELIBERATE EXPOSURE; AUTOPSIES; DRUGS; ETHANOL; NARCOTICS; BLOOD; URINE; VITREOUS HUMOR; LIVER; BRAIN; DRUG ABUSE; KIDNEYS; CENTRAL NERVOUS SYSTEM DISEASES; FORENSIC MEDICINE; ANALGESICS

Levine, B.; Saady, J.; Fierro, M.; Valentour, J. 1984 Journal of Forensic Sciences 29(2):655-659

Morphinan-6-one, 4,5alpha-epoxy-3-methoxy-17-methyl- (8 CI); Morphinan-6-one, 4,5-epoxy-3-methoxy-17-methyl-, (5alpha)- (9 CI)
125-28-1
C18-H21-N-O3
MW 299.36, MP 186 C (prisms from alcohol)

Tissue	Cases Exposure Route	Range	Mean	General Information
10684 Blood	2	Not given	0.200 mg/l	Coroner's cases testing positive for opiates. 1 case confirmed in urine only. New assay. Autopsies LC

BLOOD; DELIBERATE EXPOSURE; AUTOPSIES; NARCOTICS; DRUG ABUSE; DRUGS; FORENSIC MEDICINE; BIOACCUMULATION

Kepler, B.R.; Sutheimer, C.; Sunshine, I.; Sebrosky, G. 1984 Journal of Analytical Toxicology 8:78-80

Morphinan-6-one, 4,5alpha-epoxy-3-methoxy-17-methyl- (8 CI); Morphinan-6-one, 4,5-epoxy-3-methoxy-17-methyl-, (5alpha)- (9 CI)
125-29-1
C18-H21-N-O3
MW 299.36, MP 198 C (prisms from alcohol)

Tissue	Cases Exposure Route	Range	Mean	General Information
10686 Blood	1	Not applicable	74 mg/l	Single-drug death 1975-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS				
Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:235-280				

Morphinan-6-one, 4,5alpha-epoxy-3,14-dihydroxy-17-methyl- (8 CI); Morphinan-6-one, 4,5-epoxy-3,14-dihydroxy-17-methyl-, (5alpha)- (9 CI)
76-41-5
C17-H19-N-O4
MW 301.38, MP 248-249 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10686 Urine	6 Ingestion	a) 0.9-5.0% b) 37.2-48.1% c) 0.1-0.7% d) 2.1-3.0% e) 0% f) 0-0.8% g) 54.5-65.0%	a) 1.9+/-0.7% b) 44.1+/-5.9% c) 0.3+/-0.1% d) 2.6+/-0.1% e) 0% f) 0.1+/-0.1% g) 49.0+/-5.5%	a) Unbound parent drug b) Conjugated parent drug c) 6-beta-carbinol-metabolite, unbound d) Conjugated 6-beta-carbinol-metabolite e) 6-alpha-carbinol-metabolite, unbound f) Conjugated 6-alpha-carbinol-metabolite g) Total, parent and metabolites % dose recovered in 120 hrs after 10 mg. Prisoner volunteers, former narcotic addicts drug-free for at least 1 wk prior to study, 29-43 yr old, wt 74.8-118.8 kg GC/MS
URINE; DELIBERATE EXPOSURE; ADULTS; NARCOTICS; ANALGESICS; DRUG ABUSE; DRUGS; DRUG THERAPY; BIOACCUMULATION; METABOLITES				
Cone, E.J.; Darwin, W.D.; Buchwald, W.F.; Gorodetzky, C.W. 1983 Drug Metabolism and Disposition 11(5):446-450				

Morphinan-6alpha-ol, 7,8-didehydro-4,5alpha-epoxy-3-methoxy- (8 CI); Morphinan-6-ol, 7,8-didehydro-4,5-epoxy-3-methoxy-, (5alpha,6alpha)- (9 CI)
467-15-3
C17-H19-N-O3
MW 285.33, MP 155 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10687 Urine	5 Ingestion	a) Undetectable-2.20 mg/L b) Undetectable	a) Not given b) Not given	a) 10 hr b) 38 hr After 30 mg codeine/4 hr for 5 doses. Disappears when ratio of morphine (major metabolite) to codeine is >1. Similar results after single dose of 30 mg. Presence might be used to confirm codeine ingestion. Improved assay procedure. Volunteers HPLC
URINE; DELIBERATE EXPOSURE; DRUGS; NARCOTICS; MEASUREMENT METHODS; METABOLITES Posey, B.L.; Kimble, S.N. 1984 Journal of Analytical Toxicology 8:68-74				

Morphinan-6alpha-ol, 7,8-didehydro-4,5alpha-epoxy-3-methoxy-17-methyl- (8 CI); Morphinan-6-ol, 7,8-didehydro-4,5-epoxy-3-methoxy-17-methyl-, (5alpha,6alpha)- (9 CI)
76-57-3
C18-H21-N-O3
MW 299.36, MP 154-156 C (after drying at 80 C)

Tissue	Cases Exposure Route	Range	Mean	General Information
10686 Blood	21	0.008-6.5 mg/l	Not applicable	11 coroner's cases which tested positive for opiates. 10 cases were confirmed in bile or urine only. New assay. Autopsies LC
BLOOD; DELIBERATE EXPOSURE; AUTOPSIES; NARCOTICS; DRUG ABUSE; DRUGS; FORENSIC MEDICINE; BIOACCUMULATION Hepler, B.R.; Sutheimer, C.; Sunshine, I.; Sebrosky, G. 1984 Journal of Analytical Toxicology 8:78-80				

Tissue	Cases Exposure Route	Range	Mean	General Information
10689 Blood	a) 2 b) 18 c) 4	a) 0.23-0.74 mg/l b) 0.05-13.3 mg/l c) 0.25-0.5 mg/l	a) 0.48 mg/l b) 1.5 mg/l c) 0.35+/-0.11 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths, 1979-1980. ! Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Morphinan-6alpha-ol, 7,8-didehydro-4,5alpha-epoxy-3-methoxy-17-methyl- (8 CI); Morphinan-6-ol, 7,8-didehydro-4,5-epoxy-3-methoxy-17-methyl-, (5alpha,6alpha)- (9 CI)
76-57-3
C18-H21-N-O3
MW 299.36, MP 154-156 C (after drying at 80 C)

Tissue	Cases Exposure Route	Range	Mean	General Information
10680 Blood, plasma	6 Ingestion	a) 8.00-26.00 ug/l b) 10.00-20.00 ug/l	a) Not applicable b) Not applicable	a) 0-7 hr, mean peak (94.33+/-54.76 ug/l) At 2 hr. 60 mg as phosphate b) 0-7 hr, mean peak (92.00+/-49.17 ug/l) at 3 hr. 60 mg as resinate. Volunteers, 46.8+/-15.2 yr old, 74.1+/-9.7 kg weight, 178.3+/-6.35 cm height HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; AUSTRIA; ADULTS; ANALGESICS; DRUG THERAPY; NARCOTICS; SEDATIVES; BIOLOGICAL MONITORING; METABOLISM Nitsche, V.; Mascher, H. 1984 Journal of Pharmaceutical Sciences 73(11):1556-58				

Tissue	Cases Exposure Route	Range	Mean	General Information
10691 Blood, plasma	7 Ingestion Rectal	a) 38+/-27-117+/-34 ng/ml b) 86+/-31-120+/-21 ng/ml c) 99+/-21-160+/-27 ng/ml d) 24+/-15-116+/-41 ng/ml	a) Not given b) Not given c) Not given d) Not given	a) 0.25 and 1 hr after oral dose as solution, 93+/-20 ng/ml at 2 hr b) 0.25 and 0.5 hr after rectal solution, pH 4.3, 91+/-11 ng/ml at 2 hr c) 0.5 and 1 hr after rectal solution, pH 9, Initial measurement at 0.25 hr was 143+/-33 ng/ml d) 0.25-1 hr after rectal suppository, 97+/- ng/ml at 2 hr Range of means. 60 mg codeine phosphate administered to all groups. Crossover study. Concentration profile identical in all after 2 hr. Healthy 21-30 yr old volunteers, wt 60-74 kg, Netherlands HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; NETHERLANDS; ANALGESICS; DRUGS Moolenar, F.; Grasmeijer, G.; Visser, J.; Meijer, D.K.F. 1983 Biopharmaceutics Drug Disposition 4:195-199				

Tissue	Cases Exposure Route	Range	Mean	General Information
10692 Blood, plasma	5 Ingestion	a) Not given b) Not given c) Not given	a) 0.06+/-0.01 ug/ml b) 0.06+/-0.02 ug/ml c) 0.03+/-0.02 ug/ml	a) 1 hr b) 2 hr c) 3 hr After 30 mg as phosphate. Healthy volunteers, 21-30 yr old, 11 males, 3 females. GC
10668 Saliva	5 Ingestion	a) Not given b) Not given c) Not given	a) 0.28+/-0.25 ug/ml b) 0.18+/-0.04 ug/ml c) 0.12+/-0.04 ug/ml	a) 1 hr b) 2 hr c) 3 hr After 30 mg as phosphate. Healthy volunteers, 21-30 yr old, 11 males, 3 females. GC
SALIVA; BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; CANADA; DRUGS; SEDATIVES; BENZODIAZEPINES; ANTIHISTAMINES; NARCOTICS; ANALGESICS; FORENSIC MEDICINE; DIAZEPAMS; BIOACCUMULATION Sharp, M.E.; Wallace S.M.; Hindmarsh, K.W.; Peel, H.W. 1983 Journal of Analytical Toxicology 7:11-14				

Morphinan-6alpha-ol, 7,8-didehydro-4,5alpha-epoxy-3-methoxy-17-methyl- (8 CI); Morphinan-6-ol, 7,8-didehydro-4,5-epoxy-3-methoxy-17-methyl-, (5alpha,6alpha)- (9 CI)

76-57-3
C18-H21-N-O3
MW 299.36, MP 154-156 C (after drying at 80 C)

Tissue	Cases Exposure Route	Range	Mean	General Information
10694 Urine	5 Ingestion	a) 1.607-35.72 mg/L b) Undetectable-0.337 mg/L	a) Not given b) Not given	a) 10 hr b) 58 hr After 30 mg/4 hr for 5 doses. Levels also measured every 4 hr between a) and b). With single dose of 30 mg, undetectable after 40 hr. Improved assay procedure. Volunteers HPLC

URINE; DELIBERATE EXPOSURE; DRUGS; NARCOTICS; MEASUREMENT METHODS; METABOLITES
Posey, B.L.; Kimble, S.N. 1984 Journal of Analytical Toxicology 8:68-74

Nicotine (8 CI); Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)- (9 CI)

54-11-5
C10-H14-N2
MW 162.23, MP less than -80 C, BP 247 C (partial decomp) at 745 mm Hg, 123-125 C at 17 mm Hg, VP 1 mm Hg at 61.8 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10698 Amniotic fluid	20 Inhalation	1.5-23 ng/ml	Not given	Smokers. 16-24 wk gestation.

AMNIOTIC FLUID; PLACENTA; BLOOD SERUM; MILK; URINE; DELIBERATE EXPOSURE; ENVIRONMENTAL EXPOSURE; ADULTS; INFANTS; NICOTINE; PREGNANCY; SMOKING; LACTATION; DRUGS
Luck, W.; Nau, H. 1984 New England Journal of Medicine 311(10):673

Tissue	Cases Exposure Route	Range	Mean	General Information
10696 Blood	a) 5 b) 5 Inhalation ingestion	a) 7-8 ng/ml b) 15.0+/-2.8-12.3+/-2.3 ng/ml	a) Not given b) Not given	a) Nonsmokers, smoking 10 middle-tar cigarettes/d for 3 d b) Range of means, d 3 and d 7 of 24 mg/d as chewing gum Pulmonary epithelial permeability increased while smoking, but not while chewing gum. 26-53 yr old volunteers, medical and research staff, Harrow, England

BLOOD; DELIBERATE EXPOSURE; UNITED KINGDOM; DRUGS; NICOTINE; HEALTH HAZARDS; INHALATION; SMOKING; TOBACCOS
Minty, B.D.; Royston, D.; Jones, J.G.; Hulands, G.H. 1984 Chest 86(1):72-74

Nicotine (8 CI); Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)- (9 CI)
54-11-5
C10-H14-N2
MW 162.23, MP less than -80 C, BP 247 C (partial decomp) at 745 mm Hg, 128-125 C at 17 mm Hg, VP 1 mm Hg at 61.8 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10697 Blood	10 Inhalation	a) 2-5 ng/ml b) 2-5 ng/ml c) 2-1 ng/ml	a) Not given b) Not given c) Not given	a) Days 1 and 2, 8 am. Peak 34 ng/ml, 2 pm. Usual brand b) Days 1 and 2, 8 am. Peak 41 ng/ml, 6 pm. High nicotine (2.5 mg/cigarette) c) Days 1 and 2, 8 am. Peak 9 ng/ml 10 pm. Low nicotine (0.4 mg/cigarette) Smoked 1 cigarette every 30 min for 15 hr. No smoking 11 pm-8:30 am. 21-68 yr old (mean 39 yr) habitual smokers (20-50 cigarettes/d) Heart rate higher while smoking GC
BLOOD; URINE; DELIBERATE EXPOSURE; CALIFORNIA; ADULTS; COMPARATIVE EVALUATIONS; NICOTINE; SMOKING; DRUGS; INHALATION Benowitz, N.L.; Kuyt, F.; Jacob, P., III 1984 Clinical Pharmacology and Therapeutics 36(1):74-81				

Tissue	Cases Exposure Route	Range	Mean	General Information
10698 Blood	11 Inhalation	a) Not given b) Not given c) Not given d) Not given	a) 6.6+/-6.5 ng/ml b) 19.0+/-11.3 ng/ml c) 12.9+/-3.8 ng/ml d) 22.9+/-11.2 ng/ml	a) Before 1st cigarette following overnight abstinence from smoking b) After cigarette c) Before 2nd cigarette, 6-26 min after 1st cigarette d) After cigarette Smokers of 40 or more cigarettes/day, wt 73.6 +or- 11.2 kg GC
BLOOD; BREATH; DRUGS; CARBON MONOXIDE; NICOTINE; INHALATION; SMOKING; DELIBERATE EXPOSURE Herning, R.I.; Jones, R.T.; Benowitz, N.L.; Mines, A.H. 1983 Clinical Pharmacology and Therapeutics 33(1):84-90				

Tissue	Cases Exposure Route	Range	Mean	General Information
10699 Blood, plasma	12 Inhalation	a) Not given b) Not given c) Not given d) Not given	a) 26.5+/-13 ng/ml b) 29.5+/-14 ng/ml c) 30.9+/-13 ng/ml d) 40.7+/-15 ng/ml	a) Initial smoking period, control b) Placebo gum + smoking c) 2 mg nicotine gum + smoking d) 4 mg nicotine gum + smoking Ambulatory volunteers, men age 55 yr. Smokers. GC
BLOOD PLASMA; DELIBERATE EXPOSURE; ARKANSAS; ADULTS; STIMULANTS; NICOTINE; BIOACCUMULATION; BIOLOGICAL MONITORING; SMOKING; DRUGS Ebert, R.V.; McNabb, M.E.; Snow, S.L. 1984 Clinical Pharmacology and Therapeutics 35(4):495-498				

Nicotine (8 CI); Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)- (9 CI)
54-11-5
C10-H14-N2
MW 162.23, MP less than -80 C, BP 247 C (partial decomp) at 745 mm Hg, 128-125 C at 17 mm Hg, VP 1 mm Hg at 61.8 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10700 Blood, plasma	22 Injection	5.0-6.0 ng/ml	Not applicable	0-300 min, peak (45 ng/ml) at 60 min. IV dose was 1.5 ng/kg/min for 60 min. 13 male, 9 female, 22-55 yr old. Habitual smokers. GC

BLOOD PLASMA; DELIBERATE EXPOSURE; CALIFORNIA; ADULTS; STIMULANTS; NICOTINE; BIOACCUMULATION; BIOLOGICAL MONITORING; SMOKING; DRUGS
Benowitz, N.L.; Jacob, P. 1984 Clinical Pharmacology and Therapeutics 35(4):499-504

Tissue	Cases Exposure Route	Range	Mean	General Information
10701 Blood, plasma	69 Ingestion Inhalation	a) 14-67 ng/ml b) 0-64 ng/ml c) 15-49 ng/ml d) 3-45 ng/ml	a) 35 ng/ml b) 9.4, 22.5 ng/ml c) 28 ng/ml d) 23 ng/ml	a) Baseline levels, 2 min after cigarette, 50 subjects b) Same subjects, chewing gum with 2 or 4 ug/piece, respectively, 4 sampling times in 6 mo of no smoking c) Baseline levels, 19 smokers d) Same subjects, smoking and chewing gum with 2 or 4 ug/piece 14-24 pieces of gum chewed/d. Range estimated from graph. 29-67 olds, mean age 47, attending smoking cessation clinics. Side effects (usually nausea or stomach discomfort) experienced by a few subjects. GC

BLOOD PLASMA; DELIBERATE EXPOSURE; DRUGS; NICOTINE; SMOKING; INHALATION; INGESTION
McNabb, M.E. 1984 Canadian Medical Association Journal 131:589-592

Tissue	Cases Exposure Route	Range	Mean	General Information
10702 Blood, plasma	6 Inhalation	2.6+/-0.4-5.9+/-0.6 ng/ml	Not applicable	0-136 min, peak (19.4+/-1.9 ng/ml) at 8 min (smoking cessation). Level fell rapidly (15.4+/-1.4 ng/ml 2 min later). Healthy volunteers, 25-37 yr old, 3 males, 3 females, moderate (20-30 cigarettes daily) smokers GC

BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; UNITED KINGDOM; ADULTS; STIMULANTS; HEMOGLOBINS; NICOTINE; THIOCYANATES; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; INHALATION; METABOLISM; SMOKING; TOBACCOS; SALIVA; DRUGS
Hopkins, R.; Wood, L.E.; Sinclair, N.M. 1984 Clinical Pharmacology and Therapeutics 36(6):788-795

Nicotine (8 CI); Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)- (9 CI)
54-11-5
C10-H14-N2
MW 162.23, MP less than -80 C, BP 2e. C (partial decomp) at 745 mm Hg, 123-125 C at 17 mm Hg, VP 1 mm Hg at 61.8 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10708 Blood, plasma	a) 24 b) 28 c) 29 Inhalation	a) Not given b) Not given c) Not given	a) 24+/-12 ng/ml b) 28+/-11 ng/ml c) 33+/-15 ng/ml	a) 5 min after smoking <0.5 mg (mean 0.30+/-0.28 mg) nicotine/cigarette b) 0.5-1.0 (mean 0.76+/-0.15) mg nicotine/cigarette c) >1.0 (mean 1.20+/-0.19) mg nicotine/cigarette Significant difference a) and c), $p<0.05$. Mean 30-34 cigarettes/d. Nicotine/cigarette measured by smoking machine. Stop-smoking program participants and V.A. Medical Center employees and patients, Little Rock, AR. Average age 45+/-11 GC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; COMPARATIVE EVALUATIONS; CARBON MONOXIDE; NICOTINE; SMOKING; INHALATION Ebert, R.V.; McNabb, M.E.; McCusker, K.T.; Snow, S.L. 1983 Journal of the American Medical Association 250(20):2840-2842				

Tissue	Cases Exposure Route	Range	Mean	General Information
10704 Blood, serum	a) 27 b) 8 Inhalation Ingestion	a) 0.5-25 ng/ml b) <0.2-1.6 ng/ml	a) Not given b) Not given	a) Umbilical cord at birth b) 3-6 d old. Breast-fed Mothers smoked. No passive smoking.
10705 Milk	23 Inhalation	2-62 ng/ml	Not given	1 wk-3 mo lactation. Smokers.
AMNIOTIC FLUID; PLACENTA; BLOOD SERUM; MILK; URINE; DELIBERATE EXPOSURE; ENVIRONMENTAL EXPOSURE; ADULTS; INFANTS; NICOTINE; PREGNANCY; SMOKING; LACTATION; DRUGS Luck, W.; Nau, H. 1984 New England Journal of Medicine 311(10):672				

Tissue	Cases Exposure Route	Range	Mean	General Information
10706 Milk	6 Inhalation	a) 20-150 ng/ml b) 50-300 ng/ml c) 1-7 ng/ml d) 2-10 ng/ml	a) Not given b) Not given c) Not given d) Not given	a) Nicotine, smokers, 3 cases b) Cotinine, metabolite, same cases c) Nicotine, nonsmokers, after passive exposure to tobacco smoke during work day, 3 cases d) Cotinine, metabolite, same cases Nonsmoker nicotine, cotinine <1 ng/ml after weekend in nonsmoking household. GC
ADULTS; MILK; MEASUREMENT METHODS; NICOTINE; INHALATION; LACTATION; METABOLITES; SMOKING; TOBACCOS; DRUGS; DELIBERATE EXPOSURE; ENVIRONMENTAL EXPOSURE Hardee, G.E.; Stewart, T.; Capomacchia, A.C. 1983 Toxicology Letters 15:109-112				

Nicotine (8 CI); Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)- (9 CI)
54-11-5
C10-H14-N2
MW 162.23, MP less than -80 C, BP 247 C (partial decomp) at 745 mm Hg, 123-125 C at 17 mm Hg, VP 1 mm Hg at 61.8 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10707 Placenta	a) 5 b) 17 Inhalation	a) 2-10 ng/ml b) 3.3-28 ng/ml	a) Not given b) Not given	a) 10 wk gestation b) At birth Smokers.

AMNIOTIC FLUID; PLACENTA; BLOOD SERUM; MILK; URINE; DELIBERATE EXPOSURE; ENVIRONMENTAL EXPOSURE; ADULTS; INFANTS; NICOTINE; PREGNANCY; SMOKING; LACTATION; DRUGS
Luck, W.; Nau, H. 1984 New England Journal of Medicine 311(10):672

Tissue	Cases Exposure Route	Range	Mean	General Information
10708 Saliva	a) 13 b) 29 Inhalation	a) 0-17.6 ng/ml b) 0-166 ng/ml	a) 0 b) 12.7 ng/ml Medians	a) No reported exposure to tobacco smoke within previous week b) At least 2 exposures in previous 24 hr. 8 infants had very low or nondetectable amounts. Significant, direct dose-response relation to number of cigarettes smoked by mother. <1 yr olds, NC, excluded infants breast-fed by smokers RIA

SALIVA; URINE; ENVIRONMENTAL EXPOSURE; NORTH CAROLINA; INFANTS; COMPARATIVE EVALUATIONS; NICOTINE; SMOKING; METABOLITES; INHALATION; DRUGS
Greenberg, R.A.; Haley, N.J.; Etzel, R.A.; Loda, F.A. 1984 New England Journal of Medicine 310(17):1075-1078

Tissue	Cases Exposure Route	Range	Mean	General Information
10709 Urine	12 Ingestion	0.5-6.0 ng/ml	Not given	3-6 d olds, breastfed. Mothers smoked. No passive smoking. Levels also given in responding letter.

AMNIOTIC FLUID; PLACENTA; BLOOD SERUM; MILK; URINE; DELIBERATE EXPOSURE; ENVIRONMENTAL EXPOSURE; ADULTS; INFANTS; NICOTINE; PREGNANCY; SMOKING; LACTATION; DRUGS
Luck, W.; Nau, H. 1984 New England Journal of Medicine 311(10):672

Tissue	Cases Exposure Route	Range	Mean	General Information
10710 Urine	a) 18 b) 28 Inhalation	a) 0-59 ng b) 0-870 ng /mg creatinine	a) 0 b) 53 ng /mg creatinine Medians	a) No reported exposure to tobacco smoke within previous wk b) At least 2 exposures in previous 24 hr. 5 infants had no measurable amount. Significant, direct dose-response relation to number of cigarettes smoked by mother. <1 yr olds, NC, excluded infants breast-fed by smokers RIA

SALIVA; URINE; ENVIRONMENTAL EXPOSURE; NORTH CAROLINA; INFANTS; COMPARATIVE EVALUATIONS; NICOTINE; SMOKING; METABOLITES; INHALATION; DRUGS
Greenberg, R.A.; Haley, N.J.; Etzel, R.A.; Loda, F.A. 1984 New England Journal of Medicine 310(17):1075-1078

Nicotine (8 CI); Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)- (9 CI)
54-11-5
C10-H14-N2
MW 162.23, MP less than -80 C, BP 247 C (partial decomp) at 745 mm Hg, 123-125 C at 17 mm Hg, VP 1 mm Hg at 61.8 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10711 Urine	6 Inhalation	a) Not given b) Not given c) Not given d) Not given	A) 0.04+/-0.01 ug/ml b) 0.06+/-0.01 ug/ml c) 0.16+/-0.02 ug/ml d) 0.12+/-0.01 ug/ml	a) Before smoking b) 24 hr after smoking 1 cigarette c) 1'-N-oxide metabolite, before smoking d) 1-N-oxide metabolite, 24 hr after smoking 1 cigarette. Healthy volunteers, 25-37 yr old, 3 males, 3 females, moderate (20-30 cigarettes daily) smokers GC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; UNITED KINGDOM; ADULTS; STIMULANTS; HEMOGLOBINS; NICOTINE; THIOCYANATES; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; INHALATION; METABOLISM; SMOKING; TOBACCOS; SALIVA; DRUGS Hopkins, R.; Wood, L.E.; Sinclair, N.M. 1984 Clinical Pharmacology and Therapeutics 36(6):788-795				

Tissue	Cases Exposure Route	Range	Mean	General Information
10712 Urine	10 Inhalation	a) 2.86+/-1.96-3.72+/-2.40 mg b) 4.31+/-2.23-4.86+/-3.42 mg c) 0.70+/-0.61-0.96+/-0.61 mg d) 0.05+/-0.03-0.17+/-0.17 mg /24 hr	a) Not given b) Not given c) Not given d) Not given	a) Smoking usual brand for 3 d b) Smoking high nicotine (2.5 mg/cigarette) for 3 d c) Smoking low nicotine (0.4 mg/cigarette) for 3 d d) Abstinence for 3 d Smoked 1 cigarette every 30 min. for 15 hr. No smoking 11 pm-8:30 am. 21-43 yr old (mean 30 yr) habitual smokers (20-50 cigarettes/d) Heart rate higher while smoking GC
BLOOD; URINE; DELIBERATE EXPOSURE; CALIFORNIA; ADULTS; COMPARATIVE EVALUATIONS; NICOTINE; SMOKING; DRUGS; INHALATION Benowitz, N.L.; Kuyt, F.; Jacob, P., III 1984 Clinical Pharmacology and Therapeutics 36(1):74-81				

Nicotine, 1'-demethyl-1'-nitroso- (8 CI); Pyridine, 3-(1-nitroso-2-pyrrolidinyl)-, (S)- (9 CI)
16543-55-8
C9-H11-N3-O
MW 177.23, BP 154 C at 0.2 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10718 Saliva	7 Ingestion	7-220 ng/ml	80 ng/ml	Tobacco chewers. Compounds from tobacco or formed in situ by nitrosation of alkaloids. No N-nitroso compounds from non-chewers 25-40 yr old habitual tobacco chewers and controls (non-chewers) Oral cavities of chewers may be constantly exposed to nitroso compounds. Chewing has been associated with oral cancer GLC-TEA; HPLC
SALIVA; DELIBERATE EXPOSURE; INDIA; NITROSAMINES; TOBACCOS Sipahimalani, A.T.; Chadha, M.S.; Bhidi, S.V.; Pratap, A.I.; Nair, J. 1984 Food and Chemical Toxicology 22(4):261-264				

Nitrogen oxide [N2O]
10024-97-2
N2-O
MW 44.02, MP -90.8 C, BP -88.5 C at 760 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10714 Blood	a) 1 b) 1	a) Not applicable b) Not applicable	a) 14% b) 12%	a) Single-drug death, 1975-1980 b) Non-drug related death, 1975-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Nitroglycerin (8 CI); 1,2,3-Propanetriol, trinitrate (9 CI)
55-63-0
C3-H5-N3-O9
MW 227.09, MP 2.8 C (labile), 13.5 C (stable)

Tissue	Cases Exposure Route	Range	Mean	General Information
10715 Blood, plasma	15 Ingestion	a) 0.5-0 ng/l b) 1.5-5 ng/l c) 0.1-0.7 ng/l	a) Not applicable b) Not applicable c) Not applicable	a) 2-30 min, peak (2.4 ng/ml) at 7 min following 800 ug sublingual dose b) Active metabolite glyceryl-1,2-dinitrate, 2-30 min, peak (14 ng/ml) at 10 min following 800 ug sublingual dose c) Active metabolite glyceryl-1,3-dinitrate, 2-30 min, peak (1.3 ng/ml) at 10 min following 800 mg sublingual dose New assay Volunteers HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; UNITED KINGDOM; ADULTS; CARDIOVASCULAR DISEASES; HEART DISEASES; VASODILATORS; BIOLOGICAL MONITORING; METABOLITES Woodward, A.J.; Lewis, P.A.; Aylward, M.; Rudman, R.; Maddock, J. 1984 Journal of Pharmaceutical Sciences 73(12):1838-1840				

Tissue	Cases Exposure Route	Range	Mean	General Information
10716 Blood, plasma	12 Dermal	a) Not given b) Not given	a) 0.75 ng/ml b) 0.21 ng/ml	a) Over 24 hr after 3 applications of 2% ointment covering 50 sq cm skin b) Over 24 hr after applying patch designed to deliver 10 mg/d over 20 sq cm skin Healthy volunteers, nonsmokers LC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; VASODILATORS; DRUG THERAPY; BIOACCUMULATION; BIOAVAILABILITY; DRUGS Curry, S.H.; Kwon, H.-R.; Perrin, J.H.; Culp, J.R.; Pepine, C.J.; Yu, W.C.; Stevens, J.L. 1984 Clinical Pharmacology and Therapeutics 36(6):765-772				

Nitroglycerin (8 CI); 1,2,3-Propanetriol, trinitrate (9 CI)
55-63-0
C3-H5-N3-O9
MW 227.09, MP 2.8 C (labile), 13.5 C (stable)

Tissue	Cases Exposure Route	Range	Mean	General Information
10717 Blood, plasma	9 Dermal Sublingual	a) 1.0-1.6 ng/ml b) 1.75-2.4 ng/ml c) 0.2-0.20 ng/ml	a) Not given b) Not given c) Not given	a) Peak, at 5 min, 0.042-0.09 ng/ml at 15 min, after 0.4 mg sublingual dose b) Plateau, at 0.5-4.5 hr, 0.226 ng/ml at 5 hr, after 1 g application of 2% topical ointment (20 mg) over 200-sq cm chest area c) 1 and 5 hr, 0.12 ng/ml trough at 2 hr, after application of sustained-release patch Estimated from graph. Healthy volunteers GC
BLOOD PLASMA; DELIBERATE EXPOSURE; VASODILATORS; DRUGS; MEASUREMENT METHODS Noonan, P.K.; Kanfer, I.; Riegelman, S.; Benet, L.Z. 1984 Journal of Pharmaceutical Sciences 73(7):926-927				

Norephedrine, hydrochloride, (+-)- (8 CI); Benzenemethanol, alpha-(1-aminoethyl)-, hydrochloride, (R*,S*)-(+-)- (9 CI)
154-41-6
C9-H13-N-O.Cl-H
MW 187.67, MP 190-194 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10718 Blood, plasma	4 Ingestion	a) 120-<1 ng/mL b) 72-<1 ng/mL c) 48-<1 ng/mL d) 20-<1 ng/mL	a) Not given b) Not given c) Not given d) Not given	a) 1 and 24 hr after 25 mg b) 1 and 16 hr after 25 mg c) 8 and 12 hr after 25 mg d) 4 and 8 hr after 25 mg Improved assay procedure. Values estimated from figure. Healthy volunteers GC-EC
BLOOD PLASMA; DELIBERATE EXPOSURE; DRUGS; MEASUREMENT METHODS Orisologe, N.; Dye, D.; Bayne, W.F. 1984 Journal of Pharmaceutical Sciences 73(9):1313-1315				

Nortoxiferinium, N,N'-diallyl- (8 CI); Toxiferine I, 4,4'-didemethyl-4,4'-di-2-propenyl- (9 CI)
23214-96-2
C44-H50-N4-O2

Tissue	Cases Exposure Route	Range	Mean	General Information
10710 Blood, plasma	12 Injection	a) 1.5-0.1 ug/ml b) 2.0-0.1 ug/ml c) Not given d) Not given	a) Not applicable b) Not applicable c) 0.60+/-0.23 ug/ml d) 0.91+/-0.80 ug/ml	a) 0.08-11 hr, steady-state (0.75 ug/ml) hr during 4.3 mg/hr IV, linear decline therafter representative subject b) 0.08-11 hr, peak (2.0 ug/ml) immediately after bolus (18 mg) IV, representative subject c) Apparent steady-state during 4.3 mg/hr IV, 6 subjects d) End of 4.3 mg/kg IV where apparent steady-state level was not reached, 6 subjects. Patient volunteers, 17-63 yr old (mean 43 yr), wt 43-146 kg (mean 72 kg), 4 males, 8 females Spectrofluorimetry
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; GASTROINTESTINAL DISEASES; DRUGS; DRUG THERAPY; MUSCLE RELAXANTS; SURGERY; BIOACCUMULATION Welker, J.S.; Shanks, C.; Brown, K.F. 1983 Clinical Pharmacology and Therapeutics 33(4):510-516				

o-Anisamide, N-((1-ethyl-2-pyrrolidinyl)methyl)-5-sulfamoyl- (8 CI); Benzamide, 5-(aminosulfonyl)-N-((1-ethyl-2-pyrrolidinyl)methyl)-2-methoxy- (9 CI)
15676-16-1
C15-H25-N3-O4-S
MW 341.43, MP 175-183 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10720 Blood, plasma	1 Injection	a) 2.0-0.34 ug/ml b) 5.5-0.75 ug/ml c) 9-1.5 ug/ml	a) Not given b) Not given c) Not given	a) 50 mg, 0.5-6 hr b) 100 mg, 0.25-6 hr c) 200 mg, 0.5-6 hr After IM dose. Estimated from graph. Data representative of 9 subjects. Healthy Caucasian subjects, 25.6+/-3.2 yr, 179+/-6 cm, 68.7+/-5.0 kg HPLC
10721 Urine	9 Injection	a) Not given b) Not given c) Not given	a) 92.3+/-6.8% b) 94.1+/-6.2% c) 91.8+/-7.5% % of dose	a) 50 mg b) 100 mg c) 200 mg IM dose, 48-hr collection. Healthy Caucasian subjects, 25.6+/-3.2 yr, 179+/-6 cm, 68.7+/-5.0 kg HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; PSYCHOTROPIC DRUGS; DRUGS; BIOCONCENTRATION; MEASUREMENT METHODS Bressolle, F.; Bree, J.; Blanchin, M.D.; Gomeni, R. 1984 Journal of Pharmaceutical Sciences 73(8):1128-1136				

o-Anisamide, 4-amino-5-chloro-N-(2-(diethylamino)ethyl)- (8 CI); Benzamide, 4-amino-5-chloro-N-(2-(diethylamino)ethyl)-2-methoxy- (9 CI)
364-62-5
C14-H22-Cl-N3-O2
MW 300.81, MP Dihydrochloride monohydrate 145 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10722 Amniotic fluid	12 Injection	26.5-180.5 ng/ml	75 ng/ml	At time of delivery 10 mg IM 12 and 2 hr before surgery, 10 mg IV at start of surgery. 16 controls did not receive drug. Drug did not affect TSH or estradiol levels, raised prolactin. Mothers undergoing elective Caesarean sections HPLC
10736 Blood	12 Injection	a) 92.0-140.1 ng/ml b) 26.6-60.8 ng/ml	a) 65.0 ng/ml b) 50.0 ng/ml	a) Umbilical venous plasma b) Umbilical arterial plasma At time of delivery. Mothers received 10 mg IM 12 and 2 hr before surgery, and 10 mg IV at start of surgery. 16 controls did not receive drug. No effects on TSH, estradiol, prolactin. Fetuses of mothers undergoing elective Caesarean sections HPLC
10734 Blood, plasma	12 Injection	a) 7-81 ng/ml b) 40-335 ng/ml c) 61-151 ng/ml d) 35-70 ng/ml e) 0-2.7 ng/ml	a) 18 ng/ml b) 135 ng/ml c) 96 ng/ml d) 46 ng/ml e) Not given	a) 2 hr before surgery b) At start of surgery c) At time of delivery d) 2 hr after start of surgery e) 24 hr after start of surgery Estimated from graph. 10 mg IM 12 and 2 hr before surgery, 10 mg IV at start of surgery. 16 controls did not receive drug. Drug did not affect TSH or estradiol levels. Mothers undergoing elective Caesarean sections Elevated prolactin levels HPLC

BLOOD PLASMA; UMBILICAL CORD; AMNIOTIC FLUID; BLOOD; DELIBERATE EXPOSURE; ADULTS; FETUS; DRUGS; PREGNANCY; TRANSPLACENTAL TRANSFER
Arvela, P.; Jouppila, R.; Kauppila, A.; Paharinen, A.; Pelkonen, O.; Tuimala, R. 1983 European Journal of Clinical Pharmacology 24:345-348

Oxazolo(3,2-d)(1,4)benzodiazepin-6(5H)-one, 10-chloro-2,3,7,11b-tetrahydro-2-methyl-11b-phenyl-
24168-17-7
C18-H17-Cl-N2-O2

Tissue	Cases Exposure Route	Range	Mean	General Information
10726 Blood, serum	13 Ingestion	a) 66-148+/-7 ng/ml b) 148-9 ng/ml S.E.	a) 115+/-7 ng/ml b) Not given S.E.	a) Maximum levels, at 1.5-24.0 hr, 13 cases b) 1.5 hr and 11.5 d, 1 case After 40 mg dose. Measured as desmethyldiazepam. Estimated from graph. Healthy volunteers, 19-28 yr, 55-90 kg GC-EC

BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; BENZODIAZEPINES; DRUGS; METABOLISM; DIAZEPAMS
Ochs, H.R.; Greenblatt, D.J.; Verburg-Ochs, B.; Locniskar, A. 1984 Journal of Clinical Pharmacology 24:448-451

Oxytocin
50-56-6
C43-H66-N12-O12-S2
MW 1007.23

Tissue	Cases Exposure Route	Range	Mean	General Information
10726 Blood, plasma	11 Injection	a) 0.20-2.82 uU/ml b) 0.90-5.06 uU/ml c) 1.09-5.76 uU/ml	a) 1.01+/-0.30 uU/ml b) 3.15+/-0.42 uU/ml c) 3.91+/-0.50 uU/ml	a) Pre-therapy b) At adequate uterine contractility (computer defined) c) Steady-state value of maximum dose Dose 1 mU/min, increased 1 mU/min every 40 min until adequate uterine contractility reached. Maximum dose 1-9 mU/min (mean 3.4+/-0.7 mU/min) 10 nulliparous and 1 multiparous women with arrested labor (>/= 2 hr) RIA
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; PREGNANCY Seitchik, J.; Amico, J.; Robinson, A.G.; Castillo, M. 1984 American Journal of Obstetrics and Gynecology 150(3):225-228				

Tissue	Cases Exposure Route	Range	Mean	General Information
10727 Blood, plasma	8 Injection	Not given	63.1+/-9.2 pg/ml	5 m U/min pitocin after labor initiated with artificial rupture of the membranes. Significant increase from initial levels of 37.3+/-6.4 pg/ml. Women undergoing labor induction Increase in frequency of uterine contractions RIA
10728 Blood, plasma	15 Injection	a) Not given b) Not given c) Not given	a) 17.4+/-4.8 pg/ml b) 21.1+/-6.4 pg/ml c) 49.1+/-10.0 pg/ml d) 58.8+/-9.9 pg/ml e) 110+/-22.7 pg/ml	a) Before labor induction started, 15 cases b) 1-3 mU/min, 8 cases c) 4-6 mU/min, 12 cases d) 7-9 mU/min, 16 cases e) 10-16 mU/min, 10 cases c-e) higher than control levels, first stage of spontaneous labor, but similar to control levels of second stage. Pregnant women at term Prostaglandin F-2-alpha metabolite levels rose in successful (i.e. vaginal delivery) inductions
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; DRUG THERAPY; PREGNANCY Fuchs, A.-R.; Goeschen, K.; Husslein, P.; Rasmussen, A.B.; Fuchs, F. 1983 American Journal of Obstetrics and Gynecology 147(5):497-502				

Phenethylamine, alpha-methyl-, (+-)- (8 CI); Benzeneethanamine, alpha-methyl-, (+-)- (9 CI)
300-62-9
C9-N13-N
MW 135.20, BP 200-203 C at 760 mm Hg, 82-85 C at 15 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10729 Blood	2	0.09-2.4 mg/l	1.3 mg/l	Non-drug related deaths, 1975-1980. Autopsy, Maryland State Medical Examiners office. Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Phenethylamine, alpha-methyl-, (+-)- (8 CI); Benzeneethanamine, alpha-methyl-, (+-)- (9 CI)
300-62-9
C9-H13-N
MW 135.20, BP 200-205 C at 760 mm Hg, 82-85 C at 18 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10780 Hair	9	0-12 ng/ml	3.6+/-3.5 ng/ml	Single hair samples. Doses, frequency of abuse not known. Likely that 10 mg of amine injected IV/abuse. Levels are of free base. Suspected methamphetamine abusers, 21-40 yr old GC/CI; MS
DELIBERATE EXPOSURE; DRUGS; MEASUREMENT METHODS; DRUG ABUSE; BIOACCUMULATION; METABOLITES; FORENSIC MEDICINE; HAIR Suzuki, O.; Hattori, H.; Asano, M. 1984 Journal of Forensic Sciences 29(2):611-617				

Phenethylamine, alpha,alpha-dimethyl- (8 CI); Benzeneethanamine, alpha,alpha-dimethyl- (9 CI)
122-09-8
C10-H15-N
MW 149.23, BP 205 C at 760 mm Hg, 100 C at 21 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10781 Blood	1	Not applicable	7.6 mg/L	Samples after death from multiple drug intoxication. Dose not stated. Had taken 2 chlorpromazine tablets before going to bed. Additional drugs measured were amobarbital and ethchlorvynol. 32 yr old white male, 1.6 m, 111 kg, depressed but not suicidal. Past drug abuse. Used phentermine to lose wt GC
10782 Kidney	1	Not applicable	16 mg/kg	Samples after death from multiple drug intoxication. Dose not stated. Had taken 2 chlorpromazine tablets before going to bed. Additional drugs measured were amobarbital and ethchlorvynol. 32 yr old white male, 1.6 m, 111 kg, depressed but not suicidal. Past drug abuse. Used phentermine to lose wt GC
10783 Liver	1	Not applicable	14 mg/kg	Samples after death from multiple drug intoxication. Dose not stated. Had taken 2 chlorpromazine tablets before going to bed. Additional drugs measured were amobarbital and ethchlorvynol. 32 yr old white male, 1.6 m, 111 kg, depressed but not suicidal. Past drug abuse. Used phentermine to lose wt GC
10784 Urine	1	Not applicable	86 mg/L	Samples after death from multiple drug intoxication. Dose not stated. Had taken 2 chlorpromazine tablets before going to bed. Additional drugs measured were amobarbital and ethchlorvynol. 32 yr old white male, 1.6 m, 111 kg, depressed but not suicidal. Past drug abuse. Used phentermine to lose wt GC
DELIBERATE EXPOSURE; AUTOPSIES; BLOOD; URINE; LIVER; KIDNEYS; DRUGS Levine, B.; Caplan, Y.H.; Dixon, A.M. 1984 Journal of Forensic Sciences 29(4):1242-1245				

Phenethylamine, N,alpha-dimethyl-, (S)-(+)- (8 CI); Benzeneethanamine, N,alpha-dimethyl-, (S)- (9 CI)
537-46-2
C10-H15-N
MW 149.24, MP 170-175 C, BP 212 C at 760 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10735 Hair	9	0-47.2 ng/ml	17.5+/-15.0 ng/ml	Single hair samples. Values exceed blood levels reported in literature for fatal cases. Doses, frequency of abuse not known. Likely that 10 mg of amine injected IV/abuse. Levels are of free base. Suspected methamphetamine abusers, 21-40 yr old GC/CI; MS
DELIBERATE EXPOSURE; DRUGS; MEASUREMENT METHODS; DRUG ABUSE; BIOACCUMULATION; METABOLITES; FORENSIC MEDICINE; HAIR Suzuki, O.; Hattori, H.; Asano, M. 1984 Journal of Forensic Sciences 29(2):611-617				

Phenol, p-(2-aminoethyl)- (8 CI); Phenol, 4-(2-aminoethyl)- (9 CI)
51-67-2
C8-H11-N-O
MW 137.18, MP 164-165 C, BP 166 C at 2 mm Hg, 205-207 C at 25 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10736 Blood, plasma	7 Ingestion	a) 3.0-3.1 ng/ml b) 3.0-5.4 ng/ml c) 2.0-4.9 mg/ml d) 1.6-1.6 ng/ml e) 1.5-1.6 ng/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable	a) 0-120 min, peak (33.5 ng/ml) 30 min after 400 mg, 2 cases b) 0-120 min, peak (130.5 ng/ml) 45 min after 800 mg, 2 cases c) 0-120 min, peak (17.4 ng/ml) 45 min after 80 mg and cimoxatone (20 mg/d for 4 d) pretreatment, 2 cases d) 0-120 min, peak (16.4 ng/ml) 45 min after 80 mg. Dose 1 hr after last cimoxatone (20 mg/d for 4 d) pretreatment, 5 cases e) 0-120 min, peak (13.5 ng/ml) at 45 min after 80 mg. Dose 13 hr after last cimoxatone (20 mg/d for 4 d) pretreatment, 5 cases. Healthy volunteers HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; UNITED KINGDOM; HYPERTENSION; HYPOTENSION; DRUG INTERACTION; DRUG THERAPY; DRUGS; BIOACCUMULATION; BLOOD PRESSURE Dollery, C.T.; Brown, M.J.; Davies, D.S.; Lewis, P.J.; Strolin-Benedetti, M. 1983 Clinical Pharmacology and Therapeutics				

Phenol, 2,2'-methylenebis(3,4,6-trichloro-
70-30-4
C13-H6-Cl6-O2
MW 406.92, MP 164-165 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10737 Blood	1	Not applicable	2.9 mg/l	Single-drug death, 1975-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1985 Journal of Analytical Toxicology 7:225-230				

Phenol, 3-(3-ethylhexahydro-1-methyl-1H-azepin-3-yl-
54340-58-8
C15-H25-N-O
MW 235.39

Tissue	Cases Exposure Route	Range	Mean	General Information
10738 Blood, plasma	9 Ingestion Injection	a) 45.5+/-15.5-7.6+/-1.8 ng/ml b) 69.9+/-5.3-0.4+/-0.6 ng/ml S.E.	a) Not given b) Not given	a) 0.5 and 6 hr after single 200 mg dose. Level at 0.25 hr 20.7+/-12.1 ng/ml b) 0.25 and 6 hr after 25 mg dose IV Ranges of means. Mean peak after multiple doses (200 mg/6 hr for 3 d) 55.5 ng/ml Bioavailability low after oral dosage. Other pharmacokinetic data also reported. Healthy 23-33 yr old volunteers, mean body wt 72.2 kg. HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; UNITED KINGDOM; ANALGESICS; DRUGS Norbury, H.M.; Franklin, R.A.; Graham, D.F. 1988 European Journal of Clinical Pharmacology 35:77-80				

Phenol, 4-(2-hydroxy-3-((1-methylethyl)amino)propoxy)-, (S)-
67526-81-5
C12-H19-N-O3
MW 225.3

Tissue	Cases Exposure Route	Range	Mean	General Information
10739 Blood, plasma	8 Injection	a) 37-73 nmol/l b) 25-69 nmol/l c) 66-98 nmol/l	a) 46+/-4 nmol/l b) 35+/-5 nmol/l c) 83+/-4 nmol/l	a) Resting levels 10 min after 50 ug/kg IV b) 40% workload exercise, after 50 ug/kg IV c) 80% workload exercise, after two injections (separated by 35 min) of 50 ug/kg IV No significant difference in levels at work or rest. Healthy military conscripts, 20-23 yr old GC/MS
BLOOD PLASMA; DELIBERATE EXPOSURE; SWEDEN; ADULTS; HEART DISEASES; CARDIOVASCULAR DISEASES; BETA BLOCKER; DRUG THERAPY; DRUGS; BIOACCUMULATION Dahlstrom, U.; Atterhog, J.-H.; Jorfeldt, L. 1983 Clinical Pharmacology and Therapeutics 33(6):701-708				

Phenolphthlein, 4,7-dibromo-3',3"-disulfo- (8 CI); Benzenesulfonic acid, 3,3'-(4,7-dibromo-3-oxo-1(3H)-isobenzofuranylidene)bis(6-hydroxy- (9 CI)
17189-35-6
C20-H12-Br2-O10-S2

Tissue	Cases Exposure Route	Range	Mean	General Information
10740 Bile	a) 5 b) 2 Injection	a) 61-86% b) 20-26%	a) Not applicable b) Not applicable	a) % recovery of 5 mg/kg dose b) % recovery of 5 mg/kg dose Leakage of bile into duodenum likely, especially in two patients with low recovery. Post-cholecystectomy patients (3 female, 4 male, 42-77 yr old) Spectrophotometry

(next page)

Phenolphthlein, 4,7-dibromo-3',3"-disulfo- (8 CI); Bensenesulfonic acid, 3,3'-(4,7-dibromo-3-oxo-1(3H)-isobensofuranylidene)bis(6-hydroxy- (9 CI)
17190-85-8
C20-H12-Br2-O10-S2

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
10741 Blood, plasma	a) 7 b) 6 Injection	a) 75-6 ug/ml b) 60-0.5 ug/ml	a) Not applicable b) Not applicable	a) Post-cholecystectomy patients, 5-90 min, rapid decline from 70-15 ug/ml in 15 min, moderate decline thereafter b) Gynecological patients, 5-50 min, rapid decline from 60-7 ug/ml in 10 min, moderate decline thereafter After doses of 5 mg/kg. Gynecological (6 females, 15-51 yr old) and post-cholecystectomy (3 females, 4 males, 42-77 yr old) volunteers Spectrophotometry
10742 Urine	a) 7 b) 6 Injection	a) Not given b) Not given	a) 16+/-1% b) 6+/-1%	a) Post-cholecystectomy patients b) Gynecological patients % dose excreted in 8 hr. Dose 5 mg/kg. Gynecological (6 females, 15-51 yr old) and post-cholecystectomy (3 females, 4 males, 42-77 yr old) volunteers Spectrophotometry
BLOOD PLASMA; BILE; URINE; DELIBERATE EXPOSURE; NETHERLANDS; ADULTS; GASTROINTESTINAL DISEASES; LIVER DISEASES; DRUGS; SURGERY; BIOACCUMULATION; DYES Meijer, D.K.F.; Weitering, J.G.; Vermeer, G.A. 1983 European Journal of Clinical Pharmacology 24:549-556				

Phenothiasine, 10-(3-(dimethylamino)propyl)- (8 CI); 10H-Phenothiasine-10-ethanamine, N,N,alpha-trimethyl- (9 CI)
60-87-7
C17-H20-N2-S
MW 284.41, MP 60 C, BP 190-192 C at 3 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10743 Bile	3 Ingestion	a) 0.0-82.6 ug/ml b) 3.3-27.0 ug/ml c) 0.8-14.5 ug/ml	a) 31.7 ug/ml b) 17.0 ug/ml c) 6.1 ug/ml	a) Parent compound b) Sulphoxide metabolite c) Desmonomethyl metabolite. 1 male, 2 females, overdose victims Death from overdose HPLC
10744 Blood	2 Ingestion	a) 2.6-5.2 ug/ml b) 0.8-3.1 ug/ml c) 0.8-1.2 ug/ml	a) 3.8 ug/ml b) 1.9 ug/ml c) 1.0 ug/ml	a) Parent compound b) Sulphoxide metabolite c) Desmonomethyl metabolite. 1 male, 1 female, overdose victims Death from overdose HPLC
10745 Liver	4 Ingestion	a) 2.9-30.6 ug/ml b) 1.2-6.4 ug/ml c) 2.1-16.2 ug/ml	a) 15.0 ug/ml b) 4.4 ug/ml c) 6.8 ug/ml	a) Parent compound b) Sulphoxide metabolite c) Desmonomethyl metabolite. 2 males, 2 females, overdose victims Death from overdose HPLC

(next page)

Phenothiazine, 10-(2-(dimethylamino)propyl)- (8 CI); 10H-Phenothiazine-10-ethanamine, N,N,alpha-trimethyl- (9 CI)
60-87-7
C17-H20-N2-S
MW 284.41, MP 60 C, BP 190-192 C at 3 mm Hg

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
10746 Stomach	4 Ingestion	a) 10-208 mg b) 5-20.6 mg c) 0.01-5.4 mg	a) 67.4 mg b) 11.4 mg c) 1.8 mg	a) Parent compound b) Sulphoxide metabolite c) Desmonomethyl metabolite Measurement includes stomach contents. 2 males, 2 females, overdose victims Death from overdose HPLC
10747 Urine	4 Ingestion	a) 0.01-14.0 ug/ml b) 1.0-42.0 ug/ml c) 0.2-3.0 ug/ml	a) 5.0 ug/ml b) 18.0 ug/ml c) 1.1 ug/ml	a) Parent compound b) Sulphoxide metabolite c) Desmonomethyl metabolite. 2 males, 2 females, overdose victims Death from overdose HPLC
BLOOD; BILE; URINE; LIVER; STOMACH; CONSUMER EXPOSURE; AUSTRALIA; ADULTS; SUICIDE; CASE HISTORIES; DEPRESSION; ANTIHISTAMINES; SEDATIVES; AUTOPSIES; BIOACCUMULATION; HEALTH HAZARDS; METABOLITES; FORENSIC MEDICINE; DRUGS Allender, W.J.; Archer, A.W. 1984 Journal of Forensic Sciences 29(2):518-526				

Phenothiazine, 10-(2-(1-methyl-2-piperidyl)ethyl)-2-(methylsulfinyl)- (8 CI); 10H-Phenothiazine, 10-(2-(1-methyl-2-piperidinyl)ethyl)-2-(methylsulfinyl)- (9 CI)
5588-38-0
C21-H26-N2-O-S2
MW 386.58

Tissue	Cases Exposure Route	Range	Mean	General Information
10748 Blood	a) 8 b) 6 c) 2	a) 3.0-51 mg/l b) 0.9-5.4 mg/l c) 2.4-5.6 mg/l	a) 19.6 mg/l b) 2.5 mg/l c) 4.0+/-2.3 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths, 1979-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:226-230				

Phenothiazine, 10-(2-(1-methyl-2-piperidyl)ethyl)-2-(methylthio)- (8 CI); 10H-Phenothiazine, 10-(2-(1-methyl-2-piperidinyl)ethyl)-2-(methylthio)-(9 CI)
50-52-2
C21-H26-N2-S2
MW 370.56, MP 72-74 C, BP 250 C at 0.02 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10749 Blood	a) 11 b) 47 c) 2 d) 11	a) 1.0-26 mg/l b) 0.5-7.6 mg/l c) 5.4-38 mg/l d) 1.0-26 mg/l	a) 8.1 mg/l b) 2.5 mg/l c) 21.7+/-23.1 mg/l d) 8.1 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths, 1979-1980 d) Single-drug deaths, without ethanol, 1975-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Phenothiazine, 10-(3-(4-methyl-1-piperazinyl)propyl)-2-(trifluoromethyl)- (8 CI); 10H-Phenothiazine, 10-(3-(4-methyl-1-piperazinyl)propyl)-2-(trifluoromethyl)-(9 CI)
117-89-5
C21-H24-F3-N3-S
MW 407.49, BP 202-210 C at 0.6 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10750 Blood, plasma	24 Ingestion	a) 0.18+/-0.23-1.93+/-1.06 ng/ml b) 0.16+/-0.19-1.81+/-0.92 ng/ml	a) Not given b) Not given	a) 0.5 and 3 hr after 5 mg as hydrochloride. 0.35 ng/ml at 24 hr b) 0.5 and 4.5 hr after 5 mg as Stelazine. 0.33 ng/ml at 24 hr Ranges of means. Crossover study. Healthy drug-free adult volunteers RIA
BLOOD PLASMA; DELIBERATE EXPOSURE; PSYCHOTROPIC DRUGS; DRUGS; METABOLISM Midha, K.K.; Korchinski, E.D.; Roscoe, R.M.H.; Hawes, E.M.; Cooper, J.K.; McKay, G. 1984 Journal of Pharmaceutical Sciences 73(2):261-263				

Tissue	Cases Exposure Route	Range	Mean	General Information
10751 Blood, plasma	5 Ingestion	0.53-3.09 ng/ml	1.44+/-0.50 ng/ml S.E.	Peak after 5 mg tablet. Peak at 2.8+/-0.5 hr (range 1.5-4.5 hr). Range of means. Healthy volunteers 27-34 yrs old, wt 73.4+/-2.1 kg GC-MS
BLOOD PLASMA; DELIBERATE EXPOSURE; TRANQUILIZERS; DRUGS Midha, K.K.; Korchinski, E.D.; Verbeeck, R.K.; Roscoe, R.M.H.; Hawes, E.M.; Copper, J.K.; McKay, G. 1983 British Journal of Clinical Pharmacology 15:380-382				

Phenothiazine, 10-(3-(4-methyl-1-piperazinyl)propyl)-2-(trifluoromethyl)- (8 CI); 10H-Phenothiazine, 10-(3-(4-methyl-1-piperazinyl)propyl)-2-(trifluoromethyl)-(9 CI)
117-89-5
C21-H24-F3-N3-S
MW 407.49, BP 202-210 C at 0.6 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10752 Blood, plasma	5 Ingestion	a) 1.0-3.2 ng/ml b) 2.5-4.5 ng/ml	a) 1.9+/-0.9 ng/ml b) 3.3+/-0.7 ng/ml	a) Peak at 3.6+/-0.8 hr b) Sulfoxide metabolite, peak at 4.5+/-1.1 hr Dose: 5 mg with 50 ml water Healthy volunteers, 21-40 yr old, wt 67-94 kg RIA
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; CANADA; BEHAVIOR DISORDERS; DRUGS; DRUG THERAPY; BIOACCUMULATION; METABOLITES Aravagiri, M.; Hawes, E.M.; Midha, K.K. 1986 Journal of Pharmaceutical Sciences 75(10):1383-1387				

Phenothiazine, 2-chloro-10-(3-(dimethylamino)propyl)- (8 CI); 10H-Phenothiazine-10-propanamine, 2-chloro-N,N-dimethyl- (9 CI)
50-53-3
C17-H19-Cl-N2-S
MW 318.89

Tissue	Cases Exposure Route	Range	Mean	General Information
10753 Blood	a) 5 b) 16	a) 5.7-52.5 mg/l b) 0.2-4.2 mg/l	a) 17.5 mg/l b) 1.6 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980. Autopsy, Maryland State Medical Examiners office. Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooke, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Phosphate
14265-44-2
O4-P
MW 94.97

Tissue	Cases Exposure Route	Range	Mean	General Information
10754 Blood, serum	2	a) Not given b) Not given c) Not given d) Not given	a) 4.1 mg/dl b) 7.2 mg/dl c) 6.2 mg/dl d) 6.4 mg/dl	a) Mother, at delivery b) Umbilical cord c) Infant, 11 d d) Infant, 25 d Mother during pregnancy and lactation took 1 g Ca, vitamin and mineral supplement (400 IU vitamin D, 350 mg Ca), and 100,000 IU vitamin D/d. Normal infant levels 4.0-7.0 mg/dl. Breast fed for 25 d. Healthy infant. Her 27 yr old mother with familial multiple endocrine adenomatosis (10 yr duration)

(next page)

Phosphate
14265-44-2
O4-P
MW 94.97

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
10755 Milk	1	Not given	15.5 mg/dl	14 d lactation. Breast-fed for 25 d. Mother took 1 gm Ca, vitamin/mineral supplement (400 IU vitamin D, 350 mg Ca) and 100,000 IU vitamin D/d. 27 yr old mother with familial multiple endocrine adenomatosis (10 yr duration)
BLOOD SERUM; MILK; DELIBERATE EXPOSURE; ADULTS; INFANTS; CALCIUM; MAGNESIUM; VITAMIN D; LACTATION; METABOLITES; DRUGS Greer, F.R.; Hollis, B.W.; Napoli, J.L. 1984 Journal of Pediatrics 105(1):61-64				

Phosphoric acid, chromium (3+) salt (1:1)
7789-04-0
Cr.H3-O4-P

Tissue	Cases Exposure Route	Range	Mean	General Information
10756 Blood, cells	10 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 3.0+/-1.4 b) 7.4+/-3.5 c) 8.6+/-3.2 d) 11.2+/-3 e) 1.1+/-0.4 f) 5.7+/-3.0 g) 7.9+/-2.5 h) 9.0+/-2.0 CPM/ml(X10(E+3))	a) 2 hr, no ascites, 7 cases b) 24 hr, no ascites c) 48 hr, no ascites d) 168 hr, no ascites e) 2 hr, with ascites, 3 cases f) 24 hr, with ascites g) 48 hr, with ascites h) 168 hr, with ascites After intraperitoneal instillation of 15, 12.5, or 10 mCi. Estimated from graph. Patients, 34-77 yr, with ovarian or endometrial malignancies Scintillation counting
10757 Blood, plasma	10 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 5.2+/-1.5 b) 3.1+/-1 c) 3.2+/-1 d) 5.1+/-2 e) 2.6+/-0.5 f) 2.3+/-0.5 g) 2.3+/-0.25 h) 4.4+/-3 CPM/ml(X10(E+3))	a) 2 hr, no ascites, 7 cases b) 8 hr, no ascites c) 36 hr, no ascites d) 168 hr, no ascites e) 2 hr, with ascites, 3 cases f) 8 hr, with ascites g) 36 hr, with ascites h) 168 hr, with ascites After intraperitoneal instillation of 15, 12.5, or 10 mCi. Estimated from graph. Patients, 34-77 yr, with ovarian or endometrial malignancies Scintillation counting

(next page)

Phosphoric acid, chromium (3+) salt (1:1)
7789-04-0
Cr.H3-O4-P

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
10758 Blood, whole	20 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 7.3+/-3 b) 12.8+/-5 c) 15.4+/-5 d) 15.6+/-6 e) 4.2+/-2 f) 10.0+/-2.8 g) 11.4+/-1.5 h) 12.6 CPM/ml(X10(E+3))	a) 2 hr, no ascites, 7 cases b) 24 hr, no ascites c) 48 hr, no ascites d) 168 hr, no ascites e) 2 hr, with ascites, 3 cases f) 24 hr, with ascites g) 48 hr, with ascites h) 168 hr, with ascites After intraperitoneal instillation of 15, 12.5, or 10 mCi. Estimated from graph. Patients, 54-77 yr, with ovarian or endometrial malignancies Scintillation counting
10759 Urine	10 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 8.1+/-10 b) 2.9+/-3 c) 4.8+/-1.8 d) 8.1+/-2.5 e) 3.4+/-2 f) 2.5+/-2.5 g) 2.25+/-2 h) 2.5+/-2.5 CPM/ml(X10(E+3))	a) 4 hr, no ascites, 7 cases b) 24 hr, no ascites c) 48 hr, no ascites d) 168 hr, no ascites e) 4 hr, with ascites, 3 cases f) 24 hr, with ascites g) 48 hr, with ascites h) 168 hr, with ascites After intraperitoneal instillation of 15, 12.5, or 10 mCi. Estimated from graph. Patients, 54-77 yr, with ovarian or endometrial malignancies Scintillation counting

BLOOD; ERYTHROCYTES; BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; DRUGS; ANTITUMOR AGENTS; BIOCONCENTRATION; COMPARATIVE EVALUATIONS; NEOPLASMS
Bakri, Y.N.; Given, F.T., Jr. 1984 American Journal of Obstetrics and Gynecology 150(2):184-188

Phosphorus, isotope of mass 32
14596-37-3
P

Tissue	Cases Exposure Route	Range	Mean	General Information
10760 Milk	1 Intraperitoneal	a) Not applicable b) Not applicable	a) 9X10(E-4) uCi/ml b) 7.5X10(E-4) uCi/ml	a) 72 hr after 15 mCi of radioactive chromic phosphate IP b) 7 d Level at 7 d corresponds to rate of decay of P-32. 32 yr old with ovarian neoplasm Scintillation Counting

MILK; DELIBERATE EXPOSURE; ADULTS; NEOPLASMS; DRUG THERAPY; RADIOISOTOPES; LACTATION; DRUGS
Carlson, J.A.; Jose, B.; Sharma, S.C.; Osborne, R.P. 1983 American Journal of Obstetrics and Gynecology 147(7):840-841

Phthalazine, 1-hydrazino- (8 CI); 1(2H)-Phthalazinone, hydrazone (9 CI)
86-54-4
C8-H8-N4
MW 160.18, MP 172-173 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10761 Blood	6 Ingestion	a) 0.11-1.54 uM b) 0.39-1.79 uM	a) 0.69+/-0.22 uM b) 1.16+/-0.23 uM	a) Peak after standard breakfast b) Peak after 16 hr fast Intake of food reduced levels. Not associated with decreased liver blood flow, as measured by indocyanine green clearance. Recommended drug intake at fixed time in relation to meals. Patients with hypertension, 41-67 yr old. Four were slow acetylators, two were fast acetylators HPLC
BLOOD; DELIBERATE EXPOSURE; ADULTS; HYPERTENSION; ANTIHYPERTENSIVE AGENTS; DRUG THERAPY; BIOACCUMULATION; DRUGS Shepherd, A.M.M.; Irvine, N.A.; Ludden, T.M. 1984 Clinical Pharmacology and Therapeutics 36(1):14-18				

Tissue	Cases Exposure Route	Range	Mean	General Information
10762 Blood	a) 4 b) 4 c) 4 d) 5 e) 5 f) 5 Ingestion	a) 10.6-20.0 ng/ml b) 26.7-116.8 ng/ml c) 50.5-364.4 ng/ml d) 16.5-33.0 ng/ml e) 32.0-61.2 ng/ml f) 113.9-319.8 ng/ml	a) 15.3+/-2.2 ng/ml b) 64.7+/-21.3 ng/ml c) 202.0+/-105.0 ng/ml d) 23.0+/-3.5 ng/ml e) 42.3+/-10.1 ng/ml f) 209.3+/-33.0 ng/ml	a) Peak after 0.5 mg/kg, fast acetylators b) Peak after 1.00 mg/kg, fast acetylators c) Peak after 2.00 mg/kg, fast acetylators d) Peak after 0.25 mg/kg, slow acetylators e) Peak after 0.50 mg/kg, slow acetylators f) Peak after 1.00 mg/kg, slow acetylators Judged an effective antihypertensive agent. Hypertensive volunteers, 41-67 yr old. 4 fast acetylators, 5 slow acetylators HPLC
BLOOD; DELIBERATE EXPOSURE; ADULTS; HYPERTENSION; CARDIOVASCULAR DISEASES; ANTIHYPERTENSIVE AGENTS; DRUG THERAPY; BIOACCUMULATION; BLOOD PRESSURE; DRUGS Shepherd, A.M.M.; Irvine, N.A.; Ludden, T.M.; Lin, M.-S.; McNay, J.L. 1984 Clinical Pharmacology and Therapeutics 36(5):595-600				

Piperazine, 1-(diphenylmethyl)-4-methyl-
53-93-8
C18-H22-N2
MW 266.37, MP 105.5-107.5 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10763 Blood	1 Ingestion	Not applicable	60 ng/ml	Peak at 2 hr following single dose of 50 ng as hydrochloride (44 mg of free base). Biphasic decline to <20 ng/mL at 24 hr. Non-fasting adult male volunteer, wt 73 kg GC
10764 Urine	1 Ingestion	<4-12.5 ng/ml	Not applicable	Peak at 4 hr following single dose of 50 ng as hydrochloride (44 mg of free base). Rapid decrease by 6 hr, <4 ng/mL throughout rest of 24 hr period. Total elimination was 0.01% of dose. Non-fasting adult male volunteer, wt 73 kg GC
BLOOD; URINE; MEASUREMENT METHODS; DRUGS; DELIBERATE EXPOSURE; ANTIHISTAMINES Griffin, D.S.; Baselt, R.C. 1984 Journal of Analytical Toxicology 8:97-99				

Piperazine, 1-(4-amino-6,7-dimethoxy-2-quinazolinyl)-4-(2-furoyl)- (8 CI); Piperazine, 1-(4-amino-6,7-dimethoxy-2-quinazolinyl)-4-(2-furanylcarbonyl)- (9 CI)
19216-56-9
C19-H21-N5-O4
MW 383.43, MP 278-280 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10766 Blood, plasma	8 Ingestion	a) Not given b) Not given	a) 8.17+/-0.71 ng/ml b) 9.64+/-3.58 ng/ml	a) Peak, 160 mg prazosin alone b) Peak, dose with 1 mg verapamil Kinetics significantly altered in b), levels significantly different, P=0.02 Healthy adults with normotension, 20-40 yr Orthostasis HPLC; Fluorescence
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; ANTIHYPERTENSIVE AGENTS; DRUGS; DRUG INTERACTION; VASODILATORS; COMPARATIVE EVALUATIONS; BLOOD PRESSURE Pannisi, P.; Elliott, H.L.; Meredith, P.A.; McSharry, D.R.; Reid, J.L. 1984 Clinical Pharmacology and Therapeutics 36(6):716-723				

Piperazine, 1-acetyl-4-(4-((2-(2,4-dichlorophenyl)-2-(1H-imidazol-1-ylmethyl)-1,3-dioxolan-4 -yl)methoxy)phenyl)-, cis-
65277-42-1
C26-H28-Cl2-N4-O4
MW 531.4, MP 148 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10766 Blood, plasma	8 Ingestion	a) 1.1-0.1 mg/l b) 0.7-0.8 ug/ml	a) Not applicable b) Not applicable	a) 0.5-8 hr, peak (2.5 mg/ml) at 1 hr after 200 mg b) 0-12 hr, peak (4.5 mg/ml) at 2 hr. Data collected on day 5 following ninth 200 mg dose. Healthy volunteers, 21-46 yr old Immunodiffusion
BLOOD PLASMA; DELIBERATE EXPOSURE; UNITED KINGDOM; ADULTS; INFECTION; SKIN DISEASES; ANTIFUNGAL AGENTS; BIOACCUMULATION Daneshmend, T.K.; Warnock, D.W.; Ene, M.D.; Johnson, E.M.; Parker, G.; Richardson, M.D.; Roberts, C.J.C. 1984 Journal of Antimicrobial Chemotherapy 13:185-186				

Tissue	Cases Exposure Route	Range	Mean	General Information
10767 Blood, serum	8 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 4.36 mg/L b) 8.29 mg/L c) 9.06 mg/L d) 10.64 mg/L e) 15.10 mg/L f) 15.40 mg/L g) 20.57 mg/L h) 19.22 mg/L	a) 200 mg dose, fasting b) 200 mg dose, with breakfast c) 400 mg dose, fasting d) 400 mg dose, with breakfast e) 600 mg dose, fasting f) 600 mg dose, with breakfast g) 800 mg dose, fasting h) 800 mg dose, with breakfast Food did not reduce ketoconazole absorption Half-life increased disproportionately with increased dose. Healthy 20-31 yr olds, wt 50-75 kg Mild dizziness and nausea, headache Microbiological
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; ANTIFUNGAL AGENTS; FOODS; BIOAVAILABILITY; DRUGS Daneshmend, T.K.; Warnock, D.W.; Ene, M.D.; Johnson, E.M.; Potten, M.R.; Richardson, M.D.; Williamson, P.J. 1984 Antimicrobial Agents and Chemotherapy 25:1-3				

Piperidine, 1-(1-phenylcyclohexyl)-
77-10-1
C17-H25-N
MW 243.86, MP 46 C, BP 135-137 C at 1 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10768 Blood	a) 3 b) 46 c) 3	a) 0.62-25 mg/l b) 0.05-5.0 mg/l c) 0.03-0.44 mg/l	a) 9.0 mg/l b) 0.4 mg/l c) 0.18+/-0.19 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths 1979-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Tissue	Cases Exposure Route	Range	Mean	General Information
10769 Blood, plasma	Injection	Not given	10 pmol/ml	1 hr after 1 mg IV [H-3]-PCP.HCl. Parent drug represented over 90% of non-polar material in plasma during time period studied. Paid volunteers
URINE; BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; BEHAVIOR DISORDERS; DRUG ABUSE; DRUGS; PSYCHOTROPIC DRUGS; BIOACCUMULATION; RADIONUCLIDES Cook, C.E.; Perez-Reyes, M.; Jeffcoat, R.A.; Braine, D.R. 1983 Federation Proceedings 42:2566-2569				

Tissue	Cases Exposure Route	Range	Mean	General Information
10770 Blood, serum	75 Ingestion Inhalation	5-400 ng/ml	Not given	PCP-intoxicated patients. 73 paired saliva positive. 1 patient, saliva positive, serum negative. 24 additional patients negative. 7 of these diagnosed PCP overdose. 17-60 yr old emergency room patients, CA Various neurologic and psychotic symptoms. 1 patient asymptomatic RIA
10771 Saliva	74 Ingestion Inhalation	2-470 ng/ml	Not given	PCP-intoxicated patients. 73 paired serums positive. 2 patients, serum positive, saliva negative. 24 additional patients negative. 7 of these diagnosed PCP overdose. Amount of saliva not quantitated. 17-60 yr old emergency room patients, CA Various neurologic and psychotic symptoms. 1 patient asymptomatic RIA
URINE; SALIVA; DELIBERATE EXPOSURE; CALIFORNIA; ADOLESCENTS; ADULTS; DRUG ABUSE; PSYCHOTROPIC DRUGS McCarron, M.M.; Walberg, C.B.; Soares, J.R.; Gross, S.J.; Baselt, R.C. 1984 Journal of Analytical Toxicology 4:197-201				

Piperidine, 1-(1-phenylcyclohexyl)-
77-10-1
C17-H25-N
MW 243.38, MP 46 C, BP 135-137 C at 1 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10772 Urine	1 Injection	Not given	78+/-4%	% radiolabeled compounds excreted in 10 d after 1 mg IV [H-3]-PCP.HCl. 10% of dose excreted as parent. 5+/-1% excreted in feces. Paid volunteers

URINE; BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; BEHAVIOR DISORDERS; DRUG ABUSE; DRUGS; PSYCHOTROPIC DRUGS; BIOACCUMULATION; RADIONUCLIDES
Cook, C.E.; Perez-Reyes, M.; Jeffcoat, R.A.; Brine, D.R. 1983 Federation Proceedings 42:2866-2869

Tissue	Cases Exposure Route	Range	Mean	General Information
10778 Urine	19 Inhalation	10-812 ng/ml	Not given	Pregnant recreational users. Sampled about 3X during pregnancy. 21.1+/-3.4 yr old multiple drug abusers at prenatal clinic, Cleveland Metropolitan General Hospital, Cleveland, OH May adversely affect fetus GC-MS

URINE; DELIBERATE EXPOSURE; OHIO; ADOLESCENTS; ADULTS; DRUG ABUSE; PSYCHOTROPIC DRUGS; DRUGS
Golden, N.L.; Kuhnert, B.R.; Sobol, R.J.; Martier, S.; Bagby, B.S. 1984 American Journal of Obstetrics and Gynecology 148(3):264-269

Piperidine, 3-((4-methoxyphenoxy)methyl)-1-methyl-4-phenyl-, (3R-trans)-
80659-58-6
C20-H25-N-O2
MW 311.68

Tissue	Cases Exposure Route	Range	Mean	General Information
10774 Blood, plasma	18 Ingestion	a) 58-276 ng/ml b) <5-115 ng/ml	a) 117 ng/ml b) 30 ng/ml	a) Patients, dose of 200 or 300 (2 cases) mg b) Controls, dose of 600 mg Recommended lower dosage, closely monitored, for patients with reduced hepatic function. 12 cirrhotic patients, 6 controls GC

BLOOD PLASMA; DELIBERATE EXPOSURE; DENMARK; ADULTS; CIRRHOSIS; ANTIDEPRESSIVE AGENTS; LIVER DISEASES; DRUGS
Hansen, B.A.; Mengel, H.; Kelding, S.; Lund, J. 1984 Acta Pharmacologica et Toxicologica 55:386-390

Platinum, diamminedichloro-, cis- (8 CI); Platinum, diamminedichloro-, (SP-4-2)- (9 CI)
15663-27-1
Cl2-H6-N2-Pt
MW 300.06

Tissue	Cases Exposure Route	Range	Mean	General Information
10776 Blood, plasma	57 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 2.97+/-0.85 ug/ml b) 1.88+/-0.50 ug/ml c) 2.30+/-1.26 ug/ml d) 2.71+/-0.87 ug/ml e) 3.03+/-0.92 ug/ml f) 2.28+/-1.13 ug/ml	a) IV administration, controls, 7 cases b) Intraarterial (IA) administration, hepatic artery, 7 cases c) IA, carotid artery, 6 cases d) IA, iliac artery, 10 cases e) IA, brachial artery, 8 cases f) IA, femoral artery, 4 cases Peaks after 60-120 mg/sq m infused over 0.5-26 hrs. Patients treated for cancer X-ray fluorescence

BLOOD PLASMA; DELIBERATE EXPOSURE; CARCINOMAS; LIVER DISEASES; ANTITUMOR AGENTS; DRUGS; DRUG THERAPY; BIOACCUMULATION; NEOPLASMS
Stewart, D.J.; Benjamin, R.S.; Zimmerman, S.; Caprioli, R.M.; Wallace, S.; Chuang, V.; Calvo, D., III; Samuels, M.; Bonura, J.; Loo T.L. 1983 Cancer Research 43:917-920

Potassium
7440-09-7
K
AtW 39.098, MP 63.2 C, BP 765.5 C, VP 100 mm Hg at 590 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10776 Blood, plasma	Ingestion	a) 4.1-4.2 mEq/l b) 3.75-4.75 mEq/l	a) Not given b) Not given	a) Controls, 0 and 48 hr. Peak, 4.75 m Eq/l at 8 hr b) Patients, 0 and 72 hr. Peak, 5.25 m Eq/l at 8 hr, P<0.05 at 8 and 72 hr Single 200 mg oral dose of triamterene. Estimated from graph. 8 controls, 30+/-2 yrs old, 69+/-6 kg. 7 alcoholic cirrhosis patients, 55+/-3 yrs old, 54+/-5 kg HPLC

BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; CIRRHOSIS; DIURETICS; POTASSIUM
Villeneuve, J.P.; Rocheleau, F.; Raymond, G. 1984 Clinical Pharmacology and Therapeutics 35(6):831-837

Pregna-1,4-diene-3,11,20-trione, 17,21-dihydroxy-
50-03-3
C21-H26-O5
MW 358.44, MP 236 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10777 Blood, plasma	a) 8 b) 4 Injection	a) 40-2 ng/ml b) 40-1 ng/ml	a) Not applicable b) Not applicable	a) 0-12 hr, peak (45 ng/ml) at 2 hr. Control subject b) 0-12 hr, peak (48 ng/ml) at 2 hr. Obese subjects single dose, 38 mg prednisolone. Data from graph. Obese males, age 18-34, normal weight males, age 26-32. HPLC

BLOOD PLASMA; ADIPOSE TISSUE; DELIBERATE EXPOSURE; ADULTS; HORMONES; CORTICOSTEROIDS; BIOACCUMULATION; BIOLOGICAL MONITORING; DRUGS
Milsap, R.L.; Plaisance, K.I.; Jusko, W.J. 1984 Clinical Pharmacology and Therapeutics 36(6):824-31

Pregna-1,4-diene-3,11,20-trione, 17,21-dihydroxy-
53-03-2
C21-H26-O5
MW 358.44, MP 235 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10778 Blood, serum	a) 1 b) 2 c) 8 d) 1 e) 1 f) 1	a) Not applicable b) 80-274 ng/ml c) 213-882 ng/ml d) Not applicable e) Not applicable f) Not applicable	a) 136 ng/ml b) Not given c) Not given d) 514 ng/ml e) 466 ng/ml f) 515 ng/ml	a) 8 hr after 10 mg b) 20 mg c) 30 mg d) 40 mg e) 50 mg f) 60 mg Levels in bronchoalveolar lavage fluid were 0-6.8 ng/ml, and unrelated to dose. Non-infective inflammatory lung disease patients, 31-76 yr old. HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; PULMONARY DISEASES; CORTICOSTEROIDS; DRUGS; DRUG THERAPY Brande, A.C.; Rebuck, A.S. 1983 Lancet 2(8357):905-907				

Pregna-1,4-diene-3,20-dione, 11beta,17,21-trihydroxy- (8 CI); Pregna-1,4-diene-3,20-dione, 11,17,21-trihydroxy-, (11beta)- (9 CI)
50-24-8
C21-H26-O5
MW 360.44, MP 240-241 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10778 Blood, plasma	a) 8 b) 4 Injection	a) 3500-70 ng/ml b) 2000-60 ng/ml	a) Not applicable b) Not applicable	a) 0-12 hr, peak (3500 ng/ml) at 0 hr. Control subjects b) 0-12 hr, peak (2000 ng/ml) at 0 hr. Obese subjects Single dose, 33 mg IV. Data from graph. Obese males, age 18-34, normal weight males, age 26-32. HPLC
BLOOD PLASMA; ADIPOSE TISSUE; DELIBERATE EXPOSURE; ADULTS; HORMONES; CORTICOSTEROIDS; BIOACCUMULATION; BIOLOGICAL MONITORING; DRUGS Milsap, R.L.; Plaisance, K.I.; Jusko, W.J. 1984 Clinical Pharmacology and Therapeutics 36(6):824-31				

Tissue	Cases Exposure Route	Range	Mean	General Information
10780 Blood, plasma	6 Ingestion	a) 22-2.5 ug/100 mL b) 7.94X10(E-9)-7.67X10(E-7)M c) 1.55X10(E-7)-2.69X10(E-7)M d) 5.90X10(E-6)-1.20X10(E-6)M	a) Not given b) Not given c) Not given d) Not given	a) 1 and 12 hr, 45 mg/sq m, range of means estimated b) 1 hr, 45 mg/sq m c) 6 hr, 45 mg/sq m d) 1 and 12 hr, 5 uCi tritiated drug, range of means In vitro study also done, 5 patients. Cell uptake greater in vitro than in vivo, but cells did not selectively concentrate drug. Patients with chronic lymphocytic leukemia RIA
BLOOD PLASMA; LYMPHOCYTES; DELIBERATE EXPOSURE; DRUGS; IN VITRO ANALYSIS; IN VIVO ANALYSIS; HORMONES; GLUCOCORTICOIDS; BIOCONCENTRATION; ANTITUMOR AGENTS; NEOPLASMS Panesar, N.S.; Bird, C.C.; Roberts, B.E.; Child, J.A. 1984 Journal of Pharmaceutical Sciences 73(1):66-68				

Pregna-1,4-diene-3,20-dione, 11beta,17,21-trihydroxy- (8 CI); Pregna-1,4-diene-3,20-dione, 11,17,21-trihydroxy-, (11beta)- (9 CI)
50-24-8
C21-H28-O5
MW 360.44, MP 240-241 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10781 Blood, plasma	6 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 214+/-11 ng/ml b) 260+/-19 ng/ml c) 172+/-18 ng/ml d) 191+/-9 ng/ml	a) 90+/-8 min after 6 am dose b) 85+/-9 min after noon dose c) 118+/-15 min after 6 pm dose d) 75+/-10 min after midnight dose Mean peaks, Dose 2 mg/10 kg 20-34 yr olds. England RIA
DIURNAL VARIATIONS; UNITED KINGDOM; ADULTS; BLOOD PLASMA; ANTIINFLAMMATORY AGENTS; DRUGS; COMPARATIVE EVALUATIONS English, J.; Dunne, M.; Marke, V. 1983 Clinical Pharmacology and Therapeutics 33(3):361-365				

Tissue	Cases Exposure Route	Range	Mean	General Information
10782 Blood, serum	11 Ingestion Injection	a) 1778+/-600-585+/-110 ng/ml b) 1055+/-316-391+/-43 ng/ml	a) Not given b) Not given	a) Peaks after 20 mg dose IV, at 0.08 hr, and after 20 mg orally, at 0.7-2.0 hr. 6 subjects b) Peaks after 10 mg IV, at 0.08 hr, and after 10 mg orally at 0.5-1.5 hr. 6 subjects Ranges of means. Other pharmacokinetic and protein binding data also presented. Dose increase results in disproportionate increase in free drug. Healthy 27-52 yr old volunteers RIA
BLOOD SERUM; DELIBERATE EXPOSURE; ANTIINFLAMMATORY AGENTS; DRUGS; STEROIDS; METABOLISM Bergrem, H.; Grottum, P.; Rugstad, H.E. 1983 European Journal of Clinical Pharmacology 24:415-419				

Pregna-1,4-diene-3,20-dione, 11beta,17,21-trihydroxy-6alpha-methyl- (8 CI); Pregna-1,4-diene-3,20-dione, 11,17,21-trihydroxy-6-methyl-, (6alpha,11beta)- (9 CI)
83-43-2
C22-H30-O5
MW 374.46, MP 228-237 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10783 Blood, plasma	a) 1 b) 2 c) 2 d) 4 e) 1 Injection	a) Not applicable b) 984-2260 ng/ml c) 2256-4511 ng/ml d) 3867-4441 ng/ml e) Not applicable	a) 494 ng/ml b) Not given c) Not given d) Not given e) 6316 ng/ml	a) 1 hr after 75 mg b) 125 mg c) 250 mg d) 375 mg e) 500 mg Levels in bronchoalveolar lavage fluid were 8.5-200.4 ng/ml and unrelated to dose. Non-infective inflammatory lung disease patients, 31-76 yr old. HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; PULMONARY DISEASES; CORTICOSTEROIDS; DRUGS; DRUG THERAPY Braude, A.C.; Rebuck, A.S. 1983 Lancet 2(8357):995-997				

Progestogens (No postings in CHEMLINE).

Tissue	Cases Exposure Route	Range	Mean	General Information
10784 Blood		a) 105-258 pg/mL b) <= 24-90 pg/mL c) <90 pg/mL	a) Not given b) Not given c) Not given	a) 11 males working in high risk areas, exposed within 7 d of testing b) 12 exposed males, females. Levels <90 pg/ml considered negative c) 51 workers considered unexposed. Employees in areas of potential exposure to synthetic hormones. 22 men in high risk areas 3.77 yr, 6 women 2.73 yr Breast tenderness and modules in males, menstrual irregularity in females, and probable suppression of endogenous estrogen production in both sexes
BLOOD; OCCUPATIONAL EXPOSURE; HORMONES; BIOINDICATORS; INDUSTRIAL ATMOSPHERES; OCCUPATIONAL HAZARDS; PROGESTOGENS; DRUGS Mills, J.L.; Jefferys, J.L.; Stolley, P.D. 1984 Journal of Occupational Medicine 26(4):269-272				

Prolactin (VAN)
9002-62-4
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
MW About 25,000

Tissue	Cases Exposure Route	Range	Mean	General Information
10785 Blood, plasma	9 Ingestion	a) 6.4+/-3.4-5.6+/-3.2 ug/l b) 5.4+/-2.1-5.8+/-1.8 ug/l c) <3.0-<3.0 ug/l	a) 6.0+/-3.3 ug/l b) 5.55+/-1.95 ug/l c) <3.0 ug/l	a) Placebo b) Amantadine (100 mg dose) c) Bromocriptine (2.5+2.5 mg dose) Bromocryptine lowered level. Healthy student volunteers, mean age 23 yr RIA
BLOOD PLASMA; DELIBERATE EXPOSURE; FINLAND; ADULTS; DRUG INTERACTION; DRUG THERAPY; ALCOHOLIC BEVERAGES; BIOLOGICAL MONITORING; DRUGS Nuotto, E.; Mattila, M.J. 1984 Acta Pharmacologica et Toxicologica 55:168-178				

Propanamide, N-(1-(2-(4-ethyl-4,5-dihydro-5-oxo-1H-tetrazol-1-yl)ethyl)-4-(methoxymethyl)-4-p iperidinyl)-N-phenyl-
71195-58-9
C21-H32-N6-O2
MW 416.50

Tissue	Cases Exposure Route	Range	Mean	General Information
10786 Blood, plasma	1 Injection	Not given	95 ug/l	Initial dose 32.5 ug/kg followed by infusion of 7 ug/kg/min for 10 min then 1.6 ug/kg/min for 110 min. Patient suffered respiratory arrest, recovered after IV dose 0.4 mg naloxone. Level measured at time of arrest. 54 yr old undergoing vascular decompression of fifth cranial nerve Respiratory arrest
BLOOD PLASMA; DELIBERATE EXPOSURE; UNITED KINGDOM; ADULTS; CASE HISTORIES; NARCOTICS; ANALGESICS; BIOACCUMULATION Sebel, P.S.; Laier, J.M.; Flynn, P.J.; Simpson, B.A. 1984 British Medical Journal 289:1581-1582				

Propanamide, N-(1-(2-(4-ethyl-4,5-dihydro-5-oxo-1H-tetrazol-1-yl)ethyl)-4-(methoxymethyl)-4-p iperidinyl)-N-phenyl-
71195-58-9
C21-H32-N6-O3
MW 416.59

Tissue	Cases Exposure Route	Range	Mean	General Information
10787 Blood, plasma	a) 16 b) 9 Injection	a) 200-8 ng/ml b) 200-1.5 ng/ml	a) Not given b) Not given	a) 66-91 yr olds b) 27-44 yr olds 5 and 480 min after 50 ug/kg. Intra-abdominal surgery patients RIA
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; AGE; SURGERY; ANALGESICS; DRUGS; DRUG THERAPY Helmers, H.; Van Peer, A.; Woestenborghs, R.; Noorduin, H.; Heykants, J. 1984 Clinical Pharmacology and Therapeutics 36(2):238-243				

Propanamide, 2-amino-N-(2,6-dimethylphenyl)-
41708-72-9
C11-H16-N2-O
MW 192.26

Tissue	Cases Exposure Route	Range	Mean	General Information
10788 Blood, plasma	a) 17 b) 14 Ingestion	a) 6.6+/-0.5-7.5+/-6.0 mcg/ml b) 5.6-15.9 mcg/ml	a) Not applicable b) 10.0+/-2.7 mcg/ml	a) 0.5-8 hr, peak (6.6+/-1.0 mcg/ml) at 1 hr after mean dose of 1600 mg (1200-2400 mg range), trough of 7.5+/-6.0 at 8 hr b) Steady-state after 1600 mg (mean dose). Patients with congestive heart failure HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; CARDIOVASCULAR DISEASES; ANTIARRHYTHMIC AGENTS; DRUGS; DRUG THERAPY; BIOACCUMULATION Mohiuddin, S.M.; Esterbrooks, D.; Hilleman, D.E.; Aronow, W.S.; Patterson, A.J.; Shetch, M.H.; Moose, A.N.; Hee, T.T.; Reich, J.W. 1983 Clinical Pharmacology and Therapeutics 34(5):602-608				

Tissue	Cases Exposure Route	Range	Mean	General Information
10789 Blood, serum	a) 1 b) 1 Ingestion	a) Not applicable b) Not applicable	a) 6.7 mg/l b) 10.2 mg/l	a) On d 8, during toxic manifestations. Analogue, lignocaine, given IV (4 mg/min) on d 1, 400 mg tocainide 3X/d orally d 2-4 and 4X/d on d 5, 600 mg 4X/d on d 6-8 b) On d 5, during toxic manifestations. Drug schedule similar to a) Both levels within peak therapeutic range. 48 and 58 yr old patients with myocardial infarctions and tachycardia, United Kingdom Acute short-lived confusional state with paranoid features
BLOOD SERUM; DELIBERATE EXPOSURE; UNITED KINGDOM; CASE HISTORIES; HEART DISEASES; ANTIARRHYTHMIC AGENTS; DRUGS; DRUG THERAPY Currie, P.; Ramsdale, D.R. 1984 British Medical Journal 288:606-607				

Propanoic acid, 2-(((1-(2-amino-4-thiazolyl)-2-((2-methyl-4-oxo-1-sulfo-3-azetidinyl)amino)-2-ox oethylidene)amino)oxy)-2-methyl-, (2S-(2alpha,3beta(Z)))-
78110-38-0
C15-H17-N5-O8-S2

Tissue	Cases Exposure Route	Range	Mean	General Information
10790 Bile	a) 10 b) 4 Injection	a) 6.8+/-3.8-3.0+/-1.6 ug/ml b) 10.7+/-3.3-0.17+/-0.6 ug/ml	a) Not applicable b) Not applicable	a) Patients with T-tube biliary drainage, 0.5-12 hr, peak (30.3+/-5.1 ug/ml) at 2 hr after 1 g IV b) Patients with drainage catheter inserted for transhepatic cholangiography, 0.5-12 hr, peak (10.8+/-2.5 ug/ml) at 1 hr after 1 g IV. Patients with biliary tract disease Agar diffusion

BLOOD SERUM; BILE; DELIBERATE EXPOSURE; ADULTS; INFECTION; LIVER DISEASES; ANTIBIOTICS; DRUG THERAPY; BIOACCUMULATION; URINE; DRUGS
Martinez, O.V.; Levi, J.U.; Devlin, R.G. 1984 Antimicrobial Agents and Chemotherapy 25(3):358-361

Tissue	Cases Exposure Route	Range	Mean	General Information
10791 Blood, plasma	6 Injection	a) Not given b) Not given c) Not given d) Not given	a) 81.7+/-3.4 ug/ml b) 33.1+/-2.2 ug/ml c) 86.0+/-2.2 ug/ml d) 41.5+/-3.0 ug/ml	a) Bound and unbound, controls b) Unbound, controls c) Bound and unbound, with probenecid d) Unbound, with probenecid Steady-state during 500 mg/hr infusion (controls) or 500 mg/hr infusion preceeded by 1 g oral probenecid b.i.d. for 2 d. Healthy volunteers, 20-32 yr old, ht 181-185 cm, wt 61.2-75.6 kg Well diffusion

BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; DRUG INTERACTION; BIOACCUMULATION
Swabb, E.A.; Sugerman, A.A.; Frantz, M.; Platt, T.B.; Stern, M. 1983 Clinical Pharmacology and Therapeutics 33(5):609-614

Tissue	Cases Exposure Route	Range	Mean	General Information
10792 Blood, serum	a) 6 b) 6 c) 5 d) 6 e) 6 Injection	a) 83.0+/-21.3-31.7+/-3.3 ug/ml b) 97.8+/-5.0-17.6+/-3.8 ug/ml c) 97.4+/-4.3-14.1+/-2.7 ug/ml d) 118.7+/-6.7-11.8+/-5.3 ug/ml e) 96.9+/-16.3-5.8+/-1.2 ug/ml S.E.	a) Not given b) Not given c) Not given d) Not given e) Not given	a) Newborns <7d, wt less than 2500 g b) Newborns <7d, greater than 2500 g c) >1 mo-2 yr old d) >2 yr-12 yr old 15 min & 6 hr after 30 mg IV. Half-life inversely related to age (r=-0.71) 2 day-12 yr olds with suspected or proven infections, teaching hospitals, OK HPLC

BLOOD SERUM; URINE; CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; OKLAHOMA; NEWBORN; INFANTS; CHILDREN; INFECTION; ANTIBIOTICS; DRUGS
Stutman, H.R.; Marks, M.I.; Swabb, E.A. 1984 Antimicrobial Agents and Chemotherapy 26(2):196-199

Propanoic acid, 2-(((1-(2-amino-4-thiazolyl)-2-((2-methyl-4-oxo-1-sulfo-3-azetidinyl)amino)-2-ox oethylidene)amino)oxy)-2-methyl-, (2S-(2alpha,3beta(Z)))-
78110-38-0
C15-H17-N5-O8-S2

Tissue	Cases Exposure Route	Range	Mean	General Information
10798 Blood, serum	a) 9 b) 9 c) 12 d) 9 e) 9 Injection	a) 97.4+/-6-103.9+/-7 ug/ml b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) Not applicable b) 95.7+/-5.7 ug/ml c) 96.2+/-3.4 ug/ml d) 85.7+/-3.8 ug/ml e) 88.3+/-2.9 ug/ml f) 97.4+/-5.2 ug/ml	a) 1 g aztreonam b) Same dose plus 1 g cephradine c) Plus 600 mg clindamycin d) Plus 80 mg gentamicin ($P<0.01$) e) Plus 500 mg metronidazole ($P<0.05$) f) Plus 500 mg nafcillin Maxima after 30 min infusion, drugs infused separately in combined treatments. Ranges of means. Healthy 24 yr olds, ht 178 cm, wt, 74 kg. Caucasian, one black Microbiological

BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ANTIBIOTICS; COMPARATIVE EVALUATIONS; DRUG INTERACTION; DRUGS
Creasey, W.A.; Adamovics, J.; Dhruv, R.; Plat, T.B.; Sugerman, A.A. 1984 Journal of Clinical Pharmacology 24:176-180

Tissue	Cases Exposure Route	Range	Mean	General Information
10794 Blood, serum	a) 9 b) 9 c) 7 Injection	a) 78.5-2.6 ug/ml b) 177.2-7.8 ug/ml c) 68.5-29.9 ug/ml	a) Not applicable b) Not applicable c) Not applicable	a) 1 g, 0.5 and 8 hr b) 2 g, 0.5 and 8 hr c) 1.5 g, 2 and 4 hr a) and b), infusion for 30 min every 8 hr for 7-8 d. c), infused for 2 hr every 4 hr for 7 d. Mean peaks and troughs after first infusion. Levels from other infusions not significantly different. Levels also given for major metabolite. Ranges of means. 16-65 yr old patients with hematological malignancies Agar diffusion; HPLC

BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ANTIBIOTICS; BIOLOGICAL MONITORING; LEUKEMIA; NEOPLASMS; COMPARATIVE EVALUATIONS; DRUGS; DRUG THERAPY; MEASUREMENT METHODS
Jones, P.G.; Bodey, G.P.; Swabb, E.A.; Painstein, V.; Pasternak, J. 1984 Antimicrobial Agents and Chemotherapy 26(4):455-461

Tissue	Cases Exposure Route	Range	Mean	General Information
10795 Blood, serum	a) 10 b) 4 Injection	a) 63.2+/-4.2-1.7+/-1.0 ug/ml b) 91.2+/-6.6-2.4+/-0.8 ug/ml	a) Not applicable b) Not applicable	a) Patients with T-tube biliary drainage, 0.5-12 hr, peak (63.2+/-4.2 ug/ml) at 0.5 hr after 1 g IV b) Patients with drainage catheter inserted for transhepatic cholangiography, 0.5-12 hr, peak (91.2+/-6.6 ug/ml) at 0.5 min after 1 g IV. Patients with biliary tract disease Agar diffusion

BLOOD SERUM; BILE; DELIBERATE EXPOSURE; ADULTS; INFECTION; LIVER DISEASES; ANTIBIOTICS; DRUG THERAPY; BIOACCUMULATION; URINE; DRUGS
Martinez, O.V.; Levi, J.U.; Devlin, R.G. 1984 Antimicrobial Agents and Chemotherapy 25(3):358-361

Propanoic acid, 2-(((1-(2-amino-4-thiazolyl)-2-((2-methyl-4-oxo-1-sulfo-3-azetidinyl)amino)-2-ox oethylidene)amino)oxy)-2-methyl-, (2S-(2alpha,3beta(Z)))-
78110-38-0
C15-H17-N5-O8-S2

Tissue	Cases Exposure Route	Range	Mean	General Information
10796 Blood, serum	9 Injection	21.4-46.3 ug/ml	31.4 ug/ml	50-180 min after 1 gm IM. 44-75 yr olds (mean 64 yr) undergoing transurethral prostatectomy Cylinder plate
PROSTATE; BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; ANTIBIOTICS; DRUGS; DRUG THERAPY Madsen, P.O.; Dhruv, R.; Friedhoff, L.T. 1984 Antimicrobial Agents and Chemotherapy 26(1):20-21				

Tissue	Cases Exposure Route	Range	Mean	General Information
10797 Blood, serum	a) 6 b) 6 c) 6 Injection	a) 114+/-14.5-1.1+/-0.4 ug/ml b) 103.2+/-13.5-1.7+/-0.2 ug/ml c) 109.8+/-17.7-3.8+/-0.7 ug/ml	a) Not applicable b) Not applicable c) Not applicable	a) Controls, elimination half-life 1.0 hr b) Primary biliary cirrhosis patients, female, elimination half-life 2.2 hr, P<0.05 c) Alcoholic cirrhosis patients, male, elimination half life 3.2 hr, P<0.05 0.17 (Peaks)-12 hr after 1 g, 3 min infusion. Ranges of means. HPLC; Agar diffusion
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ILLINOIS; CIRRHOSIS; LIVER DISEASES; ANTIBIOTICS; MEASUREMENT METHODS; ALCOHOLIC BEVERAGES; DRUGS MacLeod, C.M.; Bartley, E.A.; Payne, J.A.; Hudec, E.; Vernam, K.; Devlin, R.G. 1984 Antimicrobial Agents and Chemotherapy 26(4):493-497				

Tissue	Cases Exposure Route	Range	Mean	General Information
10798 Blood, serum	54 Injection	a) 125+/-15-150+/-20 ug/ml b) 112+/-27-126+/-16 ug/ml c) 6.5+/-1.5-67+/-16 ug/ml d) 18.0+/-7.2-66.4+/-21.5 ug/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) Noninflamed meninges, 0.5 hr after infusion b) Inflamed meninges, 0.5 hr after infusion c) Noninflamed, 1-9 hr (time of cerebrospinal fluid sampling) d) Inflamed, 0.9-4.3 hr (time of cerebrospinal fluid sampling) 2 g infused over 5 min. Ranges of means. 21-64 yr old patients undergoing lumbar taps HPLC; Bioassay
BLOOD SERUM; CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; CENTRAL NERVOUS SYSTEM; DISEASES; NERVOUS SYSTEM DISEASES; ANTIBIOTICS; COMPARATIVE EVALUATIONS; MEASUREMENT METHODS; BIOLOGICAL MONITORING; DRUGS; DRUG THERAPY Duma, R.J.; Berry, A.J.; Smith, S.M.; Baggett, J.W.; Swabb, E.A.; Platt, T.B. 1984 Antimicrobial Agents and Chemotherapy 26(5):730-733				

Propanoic acid, 2-(((1-(2-amino-4-thiazolyl)-2-((2-methyl-4-oxo-1-sulfo-3-azetidinyl)amino)-2-ox oethylidene)amino)oxy)-2-methyl-, (2S-(2alpha,3beta(Z)))-

78110-36-0

C12-H17-N5-O8-S2

Tissue	Cases Exposure Route	Range	Mean	General Information
10700 Blood, serum	54 Injection	a) 72-86 ug/ml b) 82-117 ug/ml c) 72-133 ug/ml d) 79-227 ug/ml e) 33-44 ug/ml f) 41-75 ug/ml g) 46-66 ug/ml h) 40-73 ug/ml i) 1.6-2.7 ug/ml j) 6-25 ug/ml k) 11-22 ug/ml l) 18-29 ug/ml	a) 78+/-6 ug/ml b) 98+/-15 ug/ml c) 98+/-25 ug/ml d) 145+/-66 ug/ml e) 38+/-5 ug/ml f) 54+/-12 ug/ml g) 56+/-8 ug/ml h) 57+/-9 ug/ml i) 2.70+/-1.6 ug/ml j) 12+/-7 ug/ml k) 17+/-4 ug/ml l) 22+/-4 ug/ml	a) Group I, creatinine clearance >/=80 ml/min, 10 min b) Group II, creatinine clearance 30-79 ml/min, 10 min c) Group III, creatinine clearance 10-29 ml/min, 10 min d) Group IV, creatinine clearance <10 ml/min, 10 min e) Group I, 1 hr f) Group II, 1 hr g) Group III, 1 hr h) Group IV, 1 hr i) Group I, 8 hr j) Group II, 8 hr k) Group III, 8 hr l) Group IV, 8 hr After 1 g IV. Volunteers, 24-64 yr, 63.2-96.8 kg, 161-180 cm ht HPLC; Microbiological
ANTIBIOTICS; BLOOD SERUM; URINE; DELIBERATE EXPOSURE; DRUGS; ADULTS; COMPARATIVE EVALUATIONS Mihindu, J.C.L.; Scheld, W.M.; Bolton, N.D.; Spyker, D.A.; Swabb, E.A.; Bolton, W.K. 1983 Antimicrobial Agents and Chemotherapy 24(2):252-261				

Tissue	Cases Exposure Route	Range	Mean	General Information
10800 Cerebrospinal fluid	6 Injection	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) 13.3 ug/ml b) 10.1 ug/ml c) 20.6 ug/ml d) 2.1 ug/ml e) 3.4 ug/ml f) 2.4 ug/ml	a) 7 d old, 1.3 hr after dose b) 3 mo old, 3 hr after dose c) 7 mo old, 0.75 hr after dose d) 8 mo old, 4.3 hr after dose e) 2 yr old, 1.1 hr after dose f) 22 d old, 0.75 hr after dose Single 50 mg IV dose 7 day-2 yr olds with bacterial meningitis, teaching hospitals, OK HPLC
BLOOD SERUM; URINE; CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; OKLAHOMA; NEWBORN; INFANTS; CHILDREN; INFECTION; ANTIBIOTICS; DRUGS Stutman, H.R.; Marks, M.I.; Swabb, E.A. 1984 Antimicrobial Agents and Chemotherapy 26(2):196-199				

Tissue	Cases Exposure Route	Range	Mean	General Information
10801 Cerebrospinal fluid	a) 25 b) 9 Injection	a) 0.50+/-1.20-1.03+/-0.20 ug/ml b) 1.98+/-3.44-3.22+/-2.99 ug/ml	a) Not applicable b) Not applicable	a) Noninflamed meninges, plateau 1 ug/ml 4-9 hr b) Inflamed meninges, 0.16-8.11 ug/ml 1-4 hr 2 g infused over 5 min. Samples obtained after 1-8 hr from different patients. Ranges of means. 21-64 yr old patients undergoing lumbar taps Bioassay; HPLC
BLOOD SERUM; CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; CENTRAL NERVOUS SYSTEM; DISEASES; NERVOUS SYSTEM DISEASES; ANTIBIOTICS; COMPARATIVE EVALUATIONS; MEASUREMENT METHODS; BIOLOGICAL MONITORING; DRUGS; DRUG THERAPY Duma, R.J.; Berry, A.J.; Smith, S.M.; Baggett, J.W.; Swabb, E.A.; Platt, T.B. 1984 Antimicrobial Agents and Chemotherapy 26(5):730-733				

Propanoic acid, 2-(((1-(2-amino-4-thiazolyl)-2-((2-methyl-4-oxo-1-sulfo-3-azetidinyl)amino)-2-ox oethylidene)amino)oxy)-2-methyl-, (2S-(2alpha,3beta(Z)))-
78110-38-0
C13-H17-N5-O8-S2

Tissue	Cases Exposure Route	Range	Mean	General Information
10802 Prostate	9 Injection	a) 3.2-12.1 ug/g b) 1.7-12.1 ug/g	a) 7.8 ug/g b) 6.0 ug/g	a) 50-180 min after 1 gm IM, uncorrected for serum in tissue b) Corrected for serum in tissue. 44-75 yr olds (mean 64 yr) undergoing transurethral prostatectomy Cylinder plate
PROSTATE; BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; ANTIBIOTICS; DRUGS; DRUG THERAPY				
Madsen, P.O.; Dhruv, R.; Friedhoff, L.T. 1984 Antimicrobial Agents and Chemotherapy 26(1):20-21				

Tissue	Cases Exposure Route	Range	Mean	General Information
10803 Urine	29 Injection	a) 246-2141 ug/ml b) 26-129 ug/ml c) 11-1480 ug/ml d) 82-712 ug/ml e) 640-1450 ug/ml f) 5-114 ug/ml g) 610-2235 ug/ml h) 3-495 ug/ml i) 1290-7190 ug/ml j) 7-554 ug/ml	a) 786 ug/ml b) 76 ug/ml c) 656 ug/ml d) 345 ug/ml e) 993 ug/ml f) 56 ug/ml g) 1414 ug/ml h) 110 ug/ml i) 3727 ug/ml j) 111 ug/ml	a) Newborns, <7 d, greater than 2500 g. 0-3 hr after 30 mg IV, 6 cases b) 18-24 hr c) Newborns, <7 d, greater than 2500 g. 0-3 hr after IV, 6 cases d) 18-24 hr e) 1 wk-1 mo olds. 0-3 hr after 30 mg IV, 5 cases f) 18-24 hr g) >1 mo-2 yr olds 0-3 hr after 30 mg IV, 6 cases h) 18-24 hr i) >2-12 yr olds. 0-3 hr after 30 mg IV, 6 cases j) 18-24 hr 2 day-12 yr olds with suspected or proven infections, teaching hospitals, OK HPLC
BLOOD SERUM; URINE; CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; OKLAHOMA; NEWBORN; INFANTS; CHILDREN; INFECTION; ANTIBIOTICS; DRUGS				
Stutman, H.R.; Marks, M.I.; Swabb, E.A. 1984 Antimicrobial Agents and Chemotherapy 26(2):196-199				

Tissue	Cases Exposure Route	Range	Mean	General Information
10804 Urine	a) 9 b) 9 c) 12 d) 9 e) 9 Injection	a) 62.7+/-5.6-67.1+/-3.9% b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) Not applicable b) 60.9+/-4.7% c) 68.4+/-2.5% d) 66.4+/-2.7% e) 62.0+/-1.1% f) 60.4+/-5.7%	a) 1 g azotreonam b) Same dose plus 1 g cephradine c) Plus 600 mg clindamycin (P<0.05) d) Plus 80 mg gentamicin e) Plus 500 mg metronidazole f) Plus 500 mg mafcillin % of dose excreted in 24 hrs. Ranges of means. Healthy 24 yr olds, ht 178 cm, wt, 74 kg. Caucasian, one black Microbiological
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ANTIBIOTICS; COMPARATIVE EVALUATIONS; DRUG INTERACTION; DRUGS				
Creasey, W.A.; Adamovics, J.; Dhruv, R.; Plat, T.B.; Sugerman, A.A. 1984 Journal of Clinical Pharmacology 24:176-180				

Propanoic acid, 2-(((1-(2-amino-4-thiazolyl)-2-((2-methyl-4-oxo-1-sulfo-3-azetidinyl)amino)-2-ox oethylidene)amino)oxy)-2-methyl-, (2S-(2alpha,3beta(Z)))-
78110-38-0
C13-H17-N5-O8-S2

Tissue	Cases Exposure Route	Range	Mean	General Information
10605 Urine	a) 6 b) 6 c) 6 Injection	a) 2,700-103.8 ug/ml b) 4,714-127.7 ug/ml c) 2,004.5-302.2 ug/ml	a) Not applicable b) Not applicable c) Not applicable	a) Healthy controls b) Primary biliary cirrhosis patients, females c) Alcoholic cirrhosis patients males 0-2 (Peak), and 8-12 hr pools after 1 g infusion for 3 min. Average excretion after 12 hr, a) 62%, b) 54%, c) 76%. b) significantly different, c) ($P<0.05$). Ranges of means. HPLC; Agar diffusion
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ILLINOIS; CIRRHOSIS; LIVER DISEASES; ANTIBIOTICS; MEASUREMENT METHODS; ALCOHOLIC BEVERAGES; DRUGS MacLeod, C.M.; Bartley, E.A.; Payne, J.A.; Hudes, E.; Vernam, K.; Devlin, R.G. 1984 Antimicrobial Agents and Chemotherapy 26(4):403-407				

Tissue	Cases Exposure Route	Range	Mean	General Information
10606 Urine	a) 9 b) 9 c) 7 Injection	a) 21-75% b) Not given c) 31-100% d) Not given % of dose	a) 60% b) 400+/-150 ug/ml c) 63% d) 1,160+/-390 ug/ml S.E. % of dose	a) Dose: 1g every 8 hr for 8-9 d. Collections (8 hr cumulative) from individuals during days 6-9 b) Same group, collection 4-8 hr on day 7 or 8 c) Dose: 2 g every 8 hr for 8-9 d. Collections (8 hr cumulative) from individuals during days 8 and 9 d) Same group, collection 4-8 hr on day 7 or 8 Infused for 30 min. % dose excreted as metabolite SQ 26,992 was 7.6 and 3.8%. 16-65 yr old patients with hematological malignancies HPLC; Agar diffusion
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ANTIBIOTICS; BIOLOGICAL MONITORING; LEUKEMIA; NEOPLASMS; COMPARATIVE EVALUATIONS; DRUGS; DRUG THERAPY; MEASUREMENT METHODS Jones, P.G.; Bodey, G.P.; Swabb, E.A.; Feinstein, V.; Pasternak, J. 1984 Antimicrobial Agents and Chemotherapy 26(4):455-461				

Tissue	Cases Exposure Route	Range	Mean	General Information
10607 Urine	a) 10 b) 4 Injection	a) Not given b) Not given	a) 72.2+/-6.9% b) 64.9+/-8.0%	a) Patients with T-tube biliary drainage, % dose (1 g IV) excreted in 12 hr b) Patients with drainage catheter inserted for transhepatic cholangiography, % dose (1 g IV) excreted in 12 hr. Patients with biliary tract disease Agar diffusion
BLOOD SERUM; BILE; DELIBERATE EXPOSURE; ADULTS; INFECTION; LIVER DISEASES; ANTIBIOTICS; DRUG THERAPY; BIOACCUMULATION; URINE; DRUGS Martinez, O.V.; Levi, J.U.; Devlin, R.G. 1984 Antimicrobial Agents and Chemotherapy 25(3):358-361				

Propanoic acid, 2-(((1-(2-amino-4-thiazolyl)-2-((2-methyl-4-oxo-1-sulfo-2-azetidinyl)amino)-2-ox oethylidene)amino)oxy)-2-methyl-, (2S-(2alpha,3beta(Z)))-
78110-38-0
C16-H17-N5-O8-S2

Tissue	Cases Exposure Route	Range	Mean	General Information
10808 Urine	6 Injection	a) Not given b) Not given	a) 71.9+/-5.4% b) 63.3+/-3.2%	a) Controls b) Probenecid pretreatment % recovery in 48 hr after 3200 mg IV or 1 g oral probenecid b.i.d. for 2 d and 3200 mg IV. Healthy volunteers, 20-32 yr old, ht 181-185 cm, wt 61.2-75.6 kg Well diffusion
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; DRUG INTERACTION; BIOACCUMULATION Swabb, E.A.; Sugerman, A.A.; Frantz, M.; Platt, T.B.; Stern, M. 1983 Clinical Pharmacology and Therapeutics 33(5):609-614				

Tissue	Cases Exposure Route	Range	Mean	General Information
10809 Urine	24 Injection	a) 320-670 mg b) 217-511 mg c) 158-337 mg d) 0-62 mg	a) 583+/-61 mg b) 400+/-104 mg c) 210+/-68 mg d) 14+/-24 mg	a) Group I, creatinine clearance >/= 80 ml/min b) Group II, creatinine clearance 30-70 ml/min c) Group III, creatinine clearance 10-20 ml/min d) Group IV, creatinine clearance < 10 ml/min 0-48 hr total after 1 g IV. Levels for 0-2, 2-4, 4-8, 8-12, 12-24, and 24-48 hr periods also given, for drug and SQ 26,992 metabolite. Volunteers, 24-64 yr, 63.2-96.8 kg, 161-189 cm ht HPLC; Microbiological
ANTIBIOTICS; BLOOD SERUM; URINE; DELIBERATE EXPOSURE; DRUGS; ADULTS; COMPARATIVE EVALUATIONS Mikindu, J.C.L.; Scheld, W.M.; Bolton, N.D.; Spyker, D.A.; Swabb, E.A.; Bolton, W.K. 1983 Antimicrobial Agents and Chemotherapy 24(2):262-261				

Propionanilide, N-(1-phenethyl-4-piperidyl)- (8 CI); Propanamide, N-phenyl-N-(1-(2-phenylethyl)-4-piperidinyl- (9 CI)
437-38-7
C22-H28-N2-O
MW 336.46, MP 83-84 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10810 Blood, serum	12 Injection	a) Not given b) Not given c) Not given d) 9-12 ug/ml e) 12-9 ug/ml	a) 17.3+/-1.2 ug/ml b) 9.1+/-0.8 ug/ml c) 10.4+/-0.8 ug/ml d) Not applicable e) Not applicable	a) Before cardiopulmonary bypass (CPB), 100 mg/kg infusion, 5 cases b) On CPB for 5 min, 100 mg/kg infusion, 5 cases c) Off CPB for 15 min, 100 mg/kg infusion, 5 cases d) 0-10 min after beginning of ventilation, radial artery, 7 cases e) 0-10 min after beginning of ventilation, pulmonary artery, 7 cases drug sequestered in lungs during bypass. Patients undergoing heart surgery requiring cardiopulmonary bypass, 1 female, 11 males, 59+/-9 yr old, wt 82+/-9 kg GC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; SURGERY; HEART DISEASES; CARDIOVASCULAR DISEASES; ANESTHETICS; DRUG THERAPY; DRUGS; BIOACCUMULATION Bentley, J.B.; Conahan, T.J., III; Cork, R.C. 1983 Clinical Pharmacology and Therapeutics 34(5):702-706				

Propionanilide, N-(1-phenethyl-4-piperidyl)-, citrate (1:1) (8 CI); Propanamide, N-phenyl-N-(1-(2-phenylethyl)-4-piperidinyl)-, 2-hydroxy-1,2,3-propanetricarboxylate (1:1) (9 CI)
990-73-8
C22-H28-N2-O.C6-H8-O7
MW 528.45, MP 140-151 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10811 Bile	1 Injection	Not applicable	4.7 ng/L	Autopsy data. Death ascribed to fentanyl. 33 yr old physician/officer, apparently self-injected with 'Sublimaze' (fentanyl) and 'Valium' (diazepam). GC/MS
10812 Blood	1 Injection	Not applicable	4.6 ng/L	Autopsy data. Death ascribed to fentanyl. 33 yr old physician/officer, apparently self-injected with 'Sublimaze' (fentanyl) and 'Valium' (diazepam). GC/MS
SUICIDE; DRUGS; DRUG ABUSE; BLOOD; URINE; BILE; DELIBERATE EXPOSURE Garriott, J.C.; Rodrigues, R.; Di Maio, V.J.M. 1984 Journal of Analytical Toxicology 8:286-289				

Tissue	Cases Exposure Route	Range	Mean	General Information
10813 Blood	16	1-11 ng/ml	Not given	Sampled 12/70-9/82. Alpha-methyl form in 13, exact identity undetermined in 2. Drug undetected by previous routine chemical analysis. Fatal overdose cases, California RIA
BLOOD; DELIBERATE EXPOSURE; CALIFORNIA; AUTOPSIES; DRUG ABUSE; DRUGS; NARCOTICS Henderson, G.L. 1983 Proceedings of the Western Pharmacolgy Society 26:287-290				

Tissue	Cases Exposure Route	Range	Mean	General Information
10814 Blood, plasma	2 Injection	a) 60-6 ng/ml b) 26.2-21 ng/ml	a) Not given b) Not given	a) Heart patient with chronic renal failure, 12-300 min after bolus of 50 ug/kg. Large decrease when cardiopulmonary bypass started b) Patient with Wilm's tumor, normal liver and kidney function, 12-315 min after bolus of 1.64 ug/kg. Prolonged elimination half life Bolus followed by continuous infusion of 0.3 ug/kg/min for 120 or 136 min. 15 mo old, wt 8 kg and 3 yr old, wt 10.2 kg, ht 97 cm GC
BLOOD PLASMA; DELIBERATE EXPOSURE; CHILDREN; CASE HISTORIES; HEART DISEASES; NEOPLASMS; KIDNEY DISEASES; ANESTHETICS; DRUGS; DRUG THERAPY Koren, G.; Crean, P.; Goresky, G.V.; Klein, J.; MacLeod, S.M. 1984 Research Communications in Chemical Pathology and Pharmacology 46(3):371-379				

Propionanilide, N-(1-phenethyl-4-piperidyl)-, citrate (1:1) (8 CI); Propanamide, N-phenyl-N-(1-(2-phenylethyl)-4-piperidinyl)-, 2-hydroxy-1,2,3-propanetricarboxylate (1:1) (9 CI)
990-73-8
C22-H28-N2-O.C6-H8-O7
MW 528.65, MP 149-151 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10615 Urine	1 Injection	Not applicable	6.8 ug/L	Autopsy data. Death ascribed to fentanyl. Sample analyzed by radioimmunoassay had 6.7 ug/mL. 33 yr old physician/officer, apparently self-injected with 'Sublimaze' (fentanyl) and 'Valium' (diazepam). GC/MS
SUICIDE; DRUGS; DRUG ABUSE; BLOOD; URINE; BILE; DELIBERATE EXPOSURE Garriott, J.C.; Rodriguez, R.; Di Maio, V.J.M. 1984 Journal of Analytical Toxicology 8:286-289				

Prosta-5,13-dien-1-oic acid, 15-hydroxy-11,16,16-trimethyl-9-oxo-, (5Z,11alpha,13E,15R)-
69900-72-7
C22-H38-O4

Tissue	Cases Exposure Route	Range	Mean	General Information
10616 Blood, plasma	50 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 8.1+/-2.2 ng/ml b) 7.5+/-4.7 ng/ml c) 19+/-5.6 ng/ml d) 2.7+/-0.7 ng/ml e) 4.8+/-1.8 ng/ml f) 11+/-7.2 ng/ml	a) 6 cases, fasted 10 hr, peak 33+/-15 min after 0.75 mg b) 10 cases, fasted 10 hr, peak 42+/-14 min after 1.5 mg c) 12 cases, fasted 10 hr, peak 39+/-12 min after 3.0 mg d) 6 cases, peak 158+/-41 min after 0.75 mg following meal e) 10 cases, peak 130+/-51 min after 1.5 mg following meal f) 12 cases, peak 72+/-42 min after 3.0 mg following meal. Healthy volunteers, 19-51 yr old GC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; GASTROINTESTINAL DISEASES; ANTACIDS; DRUGS; DRUG THERAPY; DISEASES; BIOACCUMULATION; DIETS Wills, R.J. 1984 Journal of Clinical Pharmacology 24:196-201				

Pteridine, 2,4,7-triamino-6-phenyl- (8 CI); 2,4,7-Pteridinetriamine, 6-phenyl- (9 CI)
396-01-0
C12-H11-N7
MW 253.26, MP 316 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10617 Blood, plasma	Ingestion	a) 380-4 ng/ml b) 600-800 ng/ml c) 1000-70 ng/ml d) 150-200 ng/ml S.E.	a) Not given b) Not given c) Not given d) Not given	a) Controls, parent drug, peak, 559+/-48 ng/ml at 1.5 hr b) Patients, parent drug, peak, 1434+/-184 ng/ml at 4-6 hr, P<0.05 c) Controls, major metabolite, peak 2956+/-320 ng/ml at 1.5 hr d) Patients, major metabolite, 469+/-94 ng/ml at 48 hr, P<0.05 0.5 and 48 hr after 200 mg oral dose. Ranges of means, estimated from graph. Major metabolite p-hydroxy-triamterene sulfate (OH-T-S). 8 controls, 30+/-2 yrs old, 69+/-4 kg. 7 alcoholic cirrhosis patients, 55+/-3 yrs old, 54+/-5 kg HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; CIRRHOSIS; DIURETICS; POTASSIUM Villeneuve, J.P.; Rocheleau, P.; Raymond, G. 1984 Clinical Pharmacology and Therapeutics 35(6):831-837				

Pteridine, 2,4,7-triamino-6-phenyl- (8 CI); 2,4,7-Pteridinetriamine, 6-phenyl- (9 CI)
396-01-0
C12-H11-N7
MW 253.26, MP 316 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10818 Blood, plasma	32 Ingestion	a) 0.1-0 ug/ml b) 0.3-1 ug/ml	a) Not applicable b) Not applicable	a) 1-24 hr, peak (1.2 ug/ml) 4 hr after 100 mg, representative normal subject b) 1-24 hr, peak (4 ug/ml) 5 hr after 100 mg, representative subject with impaired renal function Hydroxy-triamterene sulphuric acid ester (active metabolite). Data estimated from graph. Volunteers, 18 males, 14 females, 24-67 yr old, wt 50-77 kg Metabolite accumulation is potential hazard for subjects with impaired renal function TLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; DIURETICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; METABOLITES Knauf, H.; Mohrle, W.; Mutschler, E. 1983 European Journal of Clinical Pharmacology 24:453-456				

Tissue	Cases Exposure Route	Range	Mean	General Information
10819 Urine	Ingestion	a) 2-2 mg b) 2-4 mg c) 70-80 mg d) 5-50 mg S.E.	a) Not given b) Not given c) Not given d) Not given	a) Controls, parent drug, 8 and 48 hr b) Patients, parent drug, 8 and 72 hr c) Controls, major metabolite, 8 and 48 hr d) Patients, major metabolite, 8 and 72 hr Cumulative recovery after 200 mg oral dose. Estimated from graph. Ranges of means. Major metabolite, P-hydroxy-triamterene sulfate. Plateau not reached in b) and d). 8 controls, 30+/-2 yrs old, 69+/-4 kg. 7 alcoholic cirrhosis patients, 55+/-3 yrs old, 54+/-5 kg HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; CIRRHOSIS; DIURETICS; POTASSIUM Villeneuve, J.P.; Rocheleau, P.; Raymond, G. 1984 Clinical Pharmacology and Therapeutics 35(6):831-837				

Tissue	Cases Exposure Route	Range	Mean	General Information
10820 Urine	32 Ingestion	a) 5-60 mg b) 1-30 mg	a) Not applicable b) Not applicable	a) Representative normal subject b) Representative subject with impaired renal function Cumulative excretion of active metabolite hydroxy-triamterene sulphuric acid ester 1-24 hr after 100 mg. Data estimated from graph. Volunteers, 18 males, 14 females, 24-67 yr old, wt 50-77 kg Metabolite accumulation is potential hazard for subjects with impaired renal function TLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; DIURETICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; METABOLITES Knauf, H.; Mohrle, W.; Mutschler, E. 1983 European Journal of Clinical Pharmacology 24:453-456				

Purine-6-thiol (8 CI); 6H-Purine-6-thione, 1,7-dihydro- (9 CI)
50-44-2
$C_5H_4N_4S$
MW 152.19, MP 313-314 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10921 Blood, cells	1 Ingestion	6.02-26.3 pg/10(E-6) cells	Not applicable	Metabolite (6-thioinosine monophosphate), 9.5 and 66.5 hr after ingesting 1500 mg. For 2.5 yr prior to overdose, took 75 mg/d. Recovered after emesis, Na-sulfate, charcoal, fluids. 15 yr old with chronic hepatitis Dizziness, frontal headache and right-upper-quadrant pain Slightly raised bilirubin (1.4 mg/dl) HPLC

BLOOD; DELIBERATE EXPOSURE; ADOLESCENTS; DRUGS; LIVER DISEASES; CIRRHOSIS
Hendrick, D.; Mirkin, B.L. 1984 Lancet 1(8371):377

Tissue	Cases Exposure Route	Range	Mean	General Information
10922 Blood, plasma	2 Ingestion	a) 800 ng/ml-30 ng/ml b) 20 ng/ml-20 ng/ml c) 300 ng/ml-20 ng/ml d) 20 ng/ml-50 ng/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 10-150 min, peak (800 ng/ml) at 10 min, after 60 mg. 10 yr old, fasted overnight b) 40-150 min, peak (100 ng/ml) at 100 min after 40 mg 15 min after standard breakfast. 10 yr old c) 45-360 min, peak (300 ng/ml) at 90 min after 125 mg. 63 yr old, fasted overnight d) 60-240 min, peak (50 ng/ml) at 150 min after 125 mg 15 min after standard breakfast. 63 yr old. Patients with acute lymphoblastic leukemia, on maintenance therapy. HPLC

BLOOD PLASMA; DELIBERATE EXPOSURE; UNITED KINGDOM; ADULTS; ADOLESCENTS; LEUKEMIA; ANTITUMOR AGENTS; DRUG THERAPY; BIOACCUMULATION; FOODS; BIOAVAILABILITY; NEOPLASMS
Burton, N.K.; Aherne, G.W.; Marks, V. 1984 Journal of Chromatography 308:409-414

Pyridasinium, 4-amino-6-methoxy-1-phenyl-, methyl sulfate
89676-87-1
$C_{11}H_{13}N_3O.CH_3O_4S$
MW 313.33

Tissue	Cases Exposure Route	Range	Mean	General Information
10923 Blood, plasma	6 Injection Ingestion	a) 170-10 ng/ml b) 7-50 ng/ml	a) Not given b) Not given	a) 0 and 12 hr after 10 mg IV b) 0.5 and 1.5 hr after 20 mg oral. 15 ng/ml at 12 hr Estimated from graph Healthy 23-46 yr olds, ht 164-182 cm, wt 63-76 kg Significant positive correlation between log plasma concentration and increase in systolic blood pressure between 0.5 and 5 h after oral dose ($R = 0.78$, $p < 0.001$) and between 0.75 and 5 hr after IV dose ($r = 0.83$, $p < 0.001$). Double isotope derivation method

GERMANY; ADULTS; HYPOTENSION; BLOOD PLASMA; DRUGS; COMPARATIVE EVALUATIONS; DELIBERATE EXPOSURE
Neugebauer, G.; Kaumeier, H.S.; Kehrhahn, O.H.; Morgenthaler, H. 1983 European Journal of Clinical Pharmacology 24:185-190

Pyridine, 2-((2-(dimethylamino)ethyl)(p-methoxybenzyl)amino)- (8 CI); 1,2-Ethanediamine, N-((4-methoxyphenyl)methyl)-N',N'-dimethyl-N-2-pyridinyl- (9 CI)
91-84-9
C17-H23-N3-O
MW 285.38, BP 201 C at 5 mm Hg, 168-172 C at 0.06 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10624 Blood	1	Not applicable	30 mg/l	Single-drug death 1975-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Pyridine, 2-((2-(dimethylamino)ethyl)-2-thenylamino)- (8 CI); 1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)- (9 CI)
91-80-5
C14-H19-N3-S
MW 261.38, BP 125-135 C at 0.45 mm Hg, also reported as 175-175 C at 3 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10625 Blood	a) 2 b) 16	a) 0.5-9.8 mg/l b) 0.1-7.2 mg/l	a) 5.2 mg/l b) 1.6 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Pyridine, 2-(alpha-(2-(dimethylamino)ethoxy)-alpha-methylbenzyl)- (8 CI); Ethanamine, N,N-dimethyl-2-(1-phenyl-1-(2-pyridinyl)ethoxy)- (9 CI)
469-21-6
C17-H22-N2-O
MW 270.38, BP 137-141 C at 0.5 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10626 Blood	2	1.0-5.7 mg/l	2.7 mg/l	Non-drug related deaths, 1975-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Pyridine, 2-(benzyl(2-(dimethylamino)ethyl)amino)- (8 CI); 1,2-Ethanediamine, N,N-dimethyl-N'-(phenylmethyl)-N'-2-pyridinyl- (9 CI)
91-81-6
C16-H21-N3
MW 255.35, BP 167-172 C at 0.1 mm Hg, also reported as 185-190 C at 1.7 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10627 Blood	2	0.4-0.7 mg/l	0.6+/-0.2 mg/l	Multiple-drug related deaths, 1979-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Pyridine, 2-(p-chloro-alpha-(2-(dimethylamino)ethyl)benzyl)- (8 CI); 2-Pyridinepropanamine, gamma-(4-chlorophenyl)-N,N-dimethyl- (9 CI)
132-22-9
C16-H19-Cl-N2
MW 274.80, MP 180-185 C (Allergisan), BP 142 C at 1.0 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10626 Blood	a) 1 b) 1	a) Not applicable b) Not applicable	a) 0.1 mg/l b) 0.8 mg/l	a) Non-drug related death, 1975-1980 b) Multiple drug related death, 1979-1980. Autopsy, Maryland State Medical Examiners office. Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Tissue	Cases Exposure Route	Range	Mean	General Information
10620 Blood, plasma	2 Ingestion	a) 12-1.5 ng/ml b) 10-1.7 ng/ml	a) Not given b) Not given	a) RIA, 3 hr (peak) and 96 hr, initial measurements for individuals 0.4 and 0.9 ng/ml at 1 hr b) HPLC, 2 hr (peak) and 96 hr, initial measurements for individuals 4.5 and 10 ng/ml at 1 hr 4 mg as maleate. Ranges of means. Estimated from graph. Healthy volunteers, wt 60 and 56 kg RIA; HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ANTIHISTAMINES; COMPARATIVE EVALUATIONS; MEASUREMENT METHODS; DRUGS Midha, K.K.; Rauw, G.; McKay, G.; Cooper, J.K.; McVittie, J. 1984 Journal of Pharmaceutical Sciences 73(8):1144-1147				

Pyridine, 2-(p-chloro-alpha-(2-(dimethylamino)ethyl)benzyl)- (8 CI); 2-Pyridinepropanamine, gamma-(4-chlorophenyl)-N,N-dimethyl- (9 CI)
132-22-9
C16-H19-Cl-N2
MW 274.80, MP 180-184 C (Allergisan), BP 142 C at 1.0 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10880 Blood, serum	11 Ingestion	a) 8.0-18.5 ng/ml b) 4.2-11.8 ng/ml c) 1.1-8.0 ng/ml	a) 13.5+/-3.5 ng/ml b) 7.2+/-2.7 ng/ml c) 4.1+/-2.8 ng/ml	a) Peak levels, at 103 hr b) At 12 hr c) At 24 hr After single 0.12 mg/kg dose. Children with severe perennial allergic rhinitus, 6-16 yr, 20.0-54.6 kg, receiving drug at least 6 mo, but not within 1 mo of study HPLC
10881 Urine	11 Ingestion	18.60+/-73.45% % of dose	44.19+/-19.10% % of dose	% recovered from 0.12 mg/kg single dose, including metabolites, in 48 hr. Children with severe perennial allergic rhinitus, 6-16 yr, 20.0-54.6 kg, receiving drug at least 6 mo, but not within 1 mo of study HPLC
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; CHILDREN; ANTIHISTAMINES; METABOLISM; METABOLITES; DRUGS Simons, K.J.; Simons, F.E.R.; Luciuk, G.H.; Frith, E.M. 1984 Journal of Pharmaceutical Sciences 73(5):595-599				

Pyridine, 2-(3-(1-pyrrolidinyl)-1-p-tolylpropenyl)-, (E)- (8 CI); Pyridine, 2-(1-(4-methylphenyl)-3-(1-pyrrolidinyl)-1-propenyl)-, (E)- (9 CI)
486-12-4
C19-H22-N2
MW 278.86, MP 59-61 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10882 Blood, plasma	5 Ingestion	1.0-0.4 ng/ml	Not applicable	30 min and 12 hr after single 2.5 mg dose. Peak 3.1-0.4 ng/ml at 1-2 hr. Estimated from graph. Healthy volunteers, mean wt 68 kg RIA
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; ANTIHISTAMINES; MEASUREMENT METHODS; DRUGS Findlay, J.W.A.; Butz, R.F.; Coker, G.G.; DeAngelis, R.L.; Welch, R.M. 1984 Journal of Pharmaceutical Sciences 73(10):1339-1344				

Pyridinium, 1-((2-carboxy-7-(((((5-carboxy-1H-imidasol-4-yl)carbonyl)amina)phenylacetyl)amin o)-8-oxo-5-thia-1-asabicyclo(4.2.0)oct-2-en-2-yl)methyl)-4-(2-sulfoethyl)-, hydroxide, inner salt, (6R-(6alpha,7beta(R*)))-
84280-03-5
C28-H26-N6-O10-S2

Tissue	Cases Exposure Route	Range	Mean	General Information
10688 Blood, plasma	a) 6 b) 6 c) 6 d) 18 e) 18 f) 18 Injection	a) 90-2 ug/ml b) 200-4 ug/ml c) 550-9 ug/ml d) 90-8 ug/ml e) 180-4 ug/ml f) 280-8 ug/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) 0-8 hr, peak (90 ug/ml) immediately after 1000 mg IV b) 0-8 hr, peak (200 ug/ml) immediately after 2000 mg IV c) 0-8 hr, peak (550 ug/ml) immediately after 4000 mg IV d) 0-8 hr, peak (90 ug/ml) immediately after last dose 1 g t.i.d. for 6 d e) 0-8 hr, peak (180 ug/ml) immediately after last dose 2 g t.i.d. for 6 d f) 0-8 hr, peak (280 ug/ml) immediately after last dose 4 g t.i.d. for 6 d Single and multiple dose comparable. Healthy volunteers HPLC
10684 Urine	a) 6 b) 6 c) 6 d) 6 e) 6 f) 6 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 67+/-11% b) 82+/-15% c) 65+/-16% d) 61+/-13% e) 62+/-19% f) 58+/-20%	a) 1000 mg IV b) 1000 mg t.i.d. IV for 6 d c) 2000 mg IV d) 2000 mg t.i.d. IV for 6 d e) 4000 mg IV f) 4000 mg t.i.d. IV for 6 d % dose collected in 24 hr. Healthy volunteers HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; INFECTION; ANTIBIOTICS; DRUG THERAPY; DRUGS; BIOACCUMULATION Lahinge, D.B.; Frie, J.M.; Brown, R.J.; Allen, H.R. 1984 Antimicrobial Agents and Chemotherapy 26(6):802-806				

Pyridinium, 1-((7-(((2-amino-4-thiazolyl)((1-carboxy-1-methylethoxy)imino)acetyl)amino)-2-ca rboxy-8-oxo-5-thia-1-asabicyclo(4.2.0)oct-2-en-2-yl)methyl)-, hydroxide, inner salt, (6R-(6alpha,7beta(Z)))-
72558-82-8
C22-H22-N6-O7-S2

Tissue	Cases Exposure Route	Range	Mean	General Information
10685 Amniotic fluid	9	1.1-6.5 ug/ml	Not given	150 and 260 min after third dose 1 g IM 3X/d. % ratio to maternal serum >80 beyond 4 hr. Cefoxitin and moxalactam given concurrently. Women with pregnancies terminated at 19-31 wk gestation Bioassay
BLOOD SERUM; AMNIOTIC FLUID; DELIBERATE EXPOSURE; FETUS; ANTIBIOTICS; DRUGS; TRANSPLACENTAL TRANSFER Giamarellou, H.; Gazis, J.; Petrikkos, G.; Antoniadis, A.; Aravantinos, D.; Daikos, G.K. 1983 American Journal of Obstetrics and Gynecology 147(8):914-918				

Pyridinium, 1-((7-(((2-amino-4-thiazolyl)((1-carboxy-1-methylethoxy)imino)acetyl)amino)-2-ca rboxy-8-oxo-5-thia-1-azabicyclo(4.2.0)oct-2-en-3-yl)methyl)-, hydroxide, inner salt, (6R-(6alpha,7beta(Z)))-

72558-82-8

C22-H22-N6-O7-S2

Tissue	Cases Exposure Route	Range	Mean	General Information
10686 Blood, plasma	a) 5 b) 4 c) 2 d) 4 e) 5 Injection	a) 100-140 ug/ml b) 73-215 ug/ml c) 110-140 ug/ml d) 41.20-213 ug/ml e) 88-124 ug/ml Range of peaks	a) 112.40+/-30.86 ug/ml b) 148.25+/-67.30 ug/ml c) 134.00 ug/ml d) 113.28+/-77.87 ug/ml e) 96.33+/-22.37 ug/ml Peaks	a) Normals b) Mildly impaired, creatine clearance (CL), 30-80 ml/ml c) Moderately impaired, CL 10-30 ml/min d) Severely impaired, CL 2-10 ml/min e) Hemodialysis patients Single 15 mg, IV dose. Peaks, 5 min after dose. Half-life increased with increasing renal impairment. Normal renal function and impaired renal function subjects HPLC

BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; ANTIBIOTICS; COMPARATIVE EVALUATIONS; HEMODIALYSIS; DRUGS

Leroy, A.; Leguy, F.; Borsa, F.; Spencer, G.R.; Pillastre, J.P.; Humbert, G. 1984 Antimicrobial Agents and Chemotherapy 25(5):638-642

Tissue	Cases Exposure Route	Range	Mean	General Information
10687 Blood, plasma	a) 1 b) 1 c) 1 Injection	a) 80-11.5 mcg/ml b) 150-7.5 mcg/ml c) 120-2.5 mcg/ml	a) Not given b) Not given c) Not given	a) 5 min and 12 hr after 1 g IV b) 5 min and 12 hr after 1 g IV c) 0 and 8 hr after 1 g IV Three representative patients (of 14). Levels increased with decreasing renal function. Half-life 1.6 hr with normal function, to 24.6 hr with severe renal impairmment. Average urinary recovery 75.5%. Dosage reduction recommended for subjects with renal failure. Values estimated from figure. Adult volunteers with different degrees of renal function HPLC

BLOOD PLASMA; DELIBERATE EXPOSURE; INFECTION; ANTIBIOTICS; DRUGS; METABOLISM

Welage, L.S.; Schults, R.W.; Schentag, J.J. 1984 Antimicrobial Agents and Chemotherapy 25(2):201-204

Tissue	Cases Exposure Route	Range	Mean	General Information
10688 Blood, plasma	31 Injection	a) 109+/-15-41.8 ug/ml b) 121+/-19 ug/ml-64+/-15 ug/ml c) 135+/-39-31+/-19 ug/ml d) 117+/-41-58+/-14 ug/ml e) 98+/-37-29+/-6 ug/ml f) 95+/-34-46+/-6 ug/ml g) Not given	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) 108+/-18.6 ug/ml	a) 7 infants (gestational age <33 wk) 0.5 & 8 hr after IV, 0-1 previous doses b) 5 infants, same age, 0.5 & 4 hr after IV, 5 or more previous doses c) 14 infants (gestational age 33-37 wk), immediately & 8 hr after IV, 0-1 previous doses d) 13 infants, same age, 1 & 4 hr after IV, 5 or more previous doses e) 8 infants (gestational age >37 wk), immediately & 8 hr after IV, 0-1 previous doses f) 5 infants, same age, 0.5 & 4 hr after IV, 5 or more previous doses g) 5 infants (mean gestational age 38 wk) single IM Dose=50 mg/kg. Pharmacokinetic data also given. Newborns with possible sepsis, Dallas, TX Agar-disk diffusion

BLOOD PLASMA; DELIBERATE EXPOSURE; TEXAS; NEWBORN; ANTIBIOTICS; DRUGS; DRUG THERAPY

McCracken, G.H., Jr.; Threlkeld, N.; Thomas, M.L. 1984 Antimicrobial Agents and Chemotherapy 26(4):583-586

Pyridinium, 1-((7-(((2-amino-4-thiazolyl)((1-carboxy-1-methylethoxy)imino)acetyl)amino)-2-ca rboxy-8-oxo-5-thia-1-azabicyclo(4.2.0)o ct-2-en-3-yl)methyl)-, hydroxide, inner salt, (6R-(6alpha,7beta(Z)))-

72558-82-8

C22-H22-N6-O7-S2

Tissue	Cases Exposure Route	Range	Mean	General Information
10689 Blood, serum	26 Injection	a) 4.1-23.5 ug/ml b) 0-1.8 ug/ml	a) 13.2+/-5.7 ug/ml b) 0.5+/-0.5 ug/ml	a) 2 hr after third dose b) 8 hr after third dose 1 g IM 3X/d. Mean level 26.7+/-4.9 at 1 hr. Cefoxitin and moxalactam given concurrently. Women with pregnancies terminated at 19-21 wk gestation Bioassay
BLOOD SERUM; AMNIOTIC FLUID; DELIBERATE EXPOSURE; FETUS; ANTIBIOTICS; DRUGS; TRANSPLACENTAL TRANSFER Giamarellou, H.; Gazis, J.; Petrikkos, G.; Antoniadis, A.; Aravantinos, D.; Daikos, G.K. 1983 American Journal of Obstetrics and Gynecology 147(8):914-918				

Tissue	Cases Exposure Route	Range	Mean	General Information
10640 Blood, serum	6 Injection	169.3+/-55.2-0.8+/-0.4 ug/ml	Not applicable	0-12 hrs, peak (59.3+/-55.2 ug/ml) at 0 time, immediately after 30 min infusion of 2 mg. Healthy volunteers, 18-35 yr old HPLC
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ADULTS; INFECTION; ANTIBIOTICS; BIOACCUMULATION; DRUGS Drusano, G.L.; Standiford, H.C.; Fitzpatrick, B.; Leslie, J.; Tangtatswasdi, P.; Ryan, P.; Tatem, B.; Moody, M.R.; Schimpff, S.C. 1984 Antimicrobial Agents and Chemotherapy 26(3):386-393				

Tissue	Cases Exposure Route	Range	Mean	General Information
10641 Blood, serum	30 Injection	a) 300-6 mg/L b) 280-16 mg/L c) 220-6 mg/L d) 210-10 mg/L	a) Not given b) Not given c) Not given d) Not given	a) Cystic fibrosis, 10 cases b) Controls, healthy students, 10 cases c) Acute pulmonary infection, cystic fibrosis, 5 cases d) No acute infection, cystic fibrosis, 5 cases 20 (peak) and 360 min, 50 mg/kg IV. Range of means. Estimated from graph. Patients, 13-27 yr, 55.2+/-9.1 kg. Healthy, nonsmoking students, 19-26 yr, 77+/-14.8 kg HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ADOLESCENTS; ADULTS; ANTIBIOTICS; DRUGS; COMPARATIVE EVALUATIONS Leeder, J.S.; Spino, M.; Isles, A.F.; Tesoro, A.M.; Gold, R.; MacLeod, S.M. 1984 Clinical Pharmacology and Therapeutics 36(3):355-362				

Pyridinium, 1-((7-(((2-amino-4-thiazolyl)((1-carboxy-1-methylethoxy)imino)acetyl)amino)-2-carboxy-8-oxo-5-thia-1-azabicyclo(4.2.0)oct-2-en-3-yl)methyl)-, hydroxide, inner salt, (6R-(6alpha,7beta(Z)))-

72558-82-8

C22-H22-N6-O7-S2

Tissue	Cases Exposure Route	Range	Mean	General Information
10842 Blood, serum	11 Injection	a) 140-0.5 mg/ml b) 150-11.3 mg/ml	a) Not applicable b) Not applicable	a) Controls, 0-12 hr, peak (140 mg/ml) at 5 min after 1 g IV b) Patients with renal insufficiency (<45 ml/min creatinine clearance), 0-12 hr, peak (150 mg/ml) at 5 min after 1 g IV Correlation of clearance with creatinine clearance was excellent (r=0.99). Healthy volunteers and patients, age 26-92 yr, 7 male, 4 female Well-diffusion

BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; BIOLOGICAL MONITORING

Ackerman, B.H.; Rose, J.; Tofte, R.W.; Rotschafer, J.C. 1984 Antimicrobial Agents and Chemotherapy 25(6):785-86

Tissue	Cases Exposure Route	Range	Mean	General Information
10843 Blood, serum	a) 12 b) 12 c) 8 d) 8 e) 8 f) 8 g) 8 h) 8 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 153.2+/-12.7 mg.h/l b) 179.8+/-12.2 mg.h/l c) 28.9+/-1.47 mg/l d) 37.2+/-1.75 mg/l e) 28.5+/-2.3 mg/l f) 33.0+/-2.1 mg/l g) 124.5+/-5.4 mg/l h) 172.5+/-6.7 mg/l	a) Male, IV, area under curve b) Female, IV, area under curve c) Male, IM into vastus lateralis, peak d) Female, IM into vastus lateralis, peak e) Male, IM into gluteus maximus, peak f) Female, IM into gluteus maximus, peak g) Male, all injections, area under curve h) Female, all injections, area under curve Kinetic behavior between sexes is similar, volume of distribution less for women. Dose 1 g. Healthy volunteers, 12 males (mean age 26 yr), 12 females (mean age 23 yr) HPLC

BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; SOUTH AFRICA; SEX; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; URINE

Sommers, D.K.; Walters, L.; Van Wyk, M.; Harding, S.M.; Paton, A.M.; Ayrton, J. 1983 Antimicrobial Agents and Chemotherapy 23(6):892-896

Tissue	Cases Exposure Route	Range	Mean	General Information
10844 Blood, serum	a) 5 b) 5 c) 7 Injection	a) 262.4+/-111.6-101.5+/-82.4 ug/ml b) 176.6+/-42-50.1+/-15 ug/ml c) 243+/-92.5-57.6+/-30 ug/ml	a) Not applicable b) Not applicable c) Not applicable	a) Noninflamed meninges b) Aseptic meningitis c) Infected meninges, mean at 6-7 hr 17.1+/-3.3 ug/ml Immediately after and 2-3 hr after 20 min infusion. Patients given single 3 g dose or 2-3 g dose every 6-8 hr for 3 doses. Ranges of means. Patients requiring lumbar puncture, 24-73 yrs old (mean 47.6 yrs) HPLC

BLOOD SERUM; CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; CARCINOMAS; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; NEOPLASMS

Fong, I.W.; Tomkins, K.B. 1984 Antimicrobial Agents and Chemotherapy 26(1):115-116

Pyridinium, 1-((7-(((2-amino-4-thiazolyl)((1-carboxy-1-methylethoxy)imino)acetyl)amino)-2-ca rboxy-8-oxo-5-thia-1-azabicyclo(4.2.0)oct-2-en-3-yl)methyl)-, hydroxide, inner salt, (6R-(6alpha,7beta(Z)))-

72558-82-8

C22-H22-N6-O7-S2

Tissue	Cases Exposure Route	Range	Mean	General Information
10845 Blood, serum	8 Injection	a) 185.5-214.5 ug/ml b) 0.8-1.1 ug/ml	a) Not given b) Not given	a) Peaks, 0 hr b) Troughs, 12 hr d 1-8, ranges of means. After 2.0 g IV over 20 min, twice daily. Change in fecal flora discussed. Healthy adults volunteers, 20-30 yr, 70.4+/-16.9 kg Headache, loose stools, nausea HPLC; Bioassay
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ADULTS; ANTIBIOTICS; DRUGS; MEASUREMENT METHODS Kemmerich, B.; Warns, H.; Lode, H.; Borner, K.; Koeppe, P.; Knothe, H. 1983 Antimicrobial Agents and Chemotherapy 24(3):333-338				

Tissue	Cases Exposure Route	Range	Mean	General Information
10846 Cerebrospinal fluid	a) 5 b) 5 c) 7 Injection	a) 0-1.8 ug/ml b) 1.8-35.4 ug/ml c) 2.7-56.4 ug/ml	a) 0.8+/-0.8 ug/ml b) 6.9+/-8.5 ug/ml c) 22.6+/-16.2 ug/ml	a) Noninflamed meninges b) Aseptic meningitis c) Infected meninges, mean at 6-7 hr 20.7+/-11.6 ug/ml 2-3 hr after 20 min infusion. Patients given single 3 g dose or 2-3 g every 6-8 hr for 3 doses. Patients requiring lumbar puncture, 24-73 yrs old (mean 47.6 yrs) HPLC
BLOOD SERUM; CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; CARCINOMAS; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; NEOPLASMS Fong, I.W.; Tomkins, K.B. 1984 Antimicrobial Agents and Chemotherapy 26(1):115-116				

Tissue	Cases Exposure Route	Range	Mean	General Information
10847 Urine	6 Injection	5810-20 ug/ml	Not applicable	2-24 hr, peak (5810 ug/ml) at 2 hr after 30 min infusion of 2 mg. Healthy volunteers, 18-35 yr old HPLC
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ADULTS; INFECTION; ANTIBIOTICS; BIOACCUMULATION; DRUGS Drusano, G.L.; Standiford, H.C.; Fitzpatrick, B.; Leslie, J.; Tangtatswasdi, P.; Ryan, P.; Tatem, B.; Moody, M.R.; Schimpff, S.C. 1984 Antimicrobial Agents and Chemotherapy 26(3):388-393				

Pyridinium, 1-((7-(((2-amino-4-thiazolyl)((1-carboxy-1-methylethoxy)imino)acetyl)amino)-2-ca rboxy-8-oxo-5-thia-1-asabicyclo(4.2.0)oct-2-en-3-yl)methyl)-, hydroxide, inner salt, (6R-(6alpha,7beta(Z)))-

72558-82-8

C22-H22-N6-O7-S2

Tissue	Cases Exposure Route	Range	Mean	General Information
10848 Urine	20 Injection	a) 6.9-40.7 mg/ml b) 4.2-42.9 mg/ml c) Not given d) Not given	a) 18.0+/-11.7 mg/ml b) 19.8+/-11.0 mg/ml c) 0.855+/-0.075% of dose d) 0.856+/-0.068 % of dose	a) Control, 10 cases, 0-2 hr pooled sample b) Cystic fibrosis, 10 cases, 0-2 hr pooled sample c) Control, 10 cases, total amount recovered d) Cystic fibrosis, 10 cases, total amount recovered Total body clearance 64.8% greater in cystic fibrosis group, when normalised for body wt. Patients, 13-27 yr, 55.2+/-9.1 kg. Healthy, nonsmoking students, 19-26 yr, 77+/-14.8 kg HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ADOLESCENTS; ADULTS; ANTIBIOTICS; DRUGS; COMPARATIVE EVALUATIONS Leeder, J.S.; Spino, M.; Isles, A.F.; Tesoro, A.M.; Gold, R.; MacLeod, S.M. 1984 Clinical Pharmacology and Therapeutics 36(3):355-362				

Tissue	Cases Exposure Route	Range	Mean	General Information
10849 Urine	8 Injection	a) Not given b) Not given c) Not given	a) 47.5+/-15% b) 65+/-15% c) 71.5+/-12.2% % of dose	a) 0-3 hr b) 3-6 hr c) 6-12 hr After 2.0 g IV over 20 min, twice daily for 8 d. Change in fecal flora discussed. Healthy adults volunteers, 20-30 yr, 70.4+/-16.9 kg Headache, loose stools, nausea HPLC; Bioassay
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ADULTS; ANTIBIOTICS; DRUGS; MEASUREMENT METHODS Kemmerich, B.; Warns, H.; Lode, H.; Borner, K.; Koeppe, P.; Knothe, H. 1983 Antimicrobial Agents and Chemotherapy 24(3):333-338				

Tissue	Cases Exposure Route	Range	Mean	General Information
10850 Urine	a) 12 b) 12 c) 8 d) 8 e) 8 f) 8 g) 16 h) 16 i) 16 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 719+/-43 mg b) 700+/-46 mg c) 764+/-29 mg d) 765+/-40 mg e) 734+/-40 mg f) 727+/-39 mg g) 650+/-36 mg h) 764+/-24 mg i) 730+/-25 mg	a) Male, IV b) Female, IV c) Male, IM into vastus lateralis d) Female, IM into vastus lateralis e) Male, IM into gluteus maximus f) Female, IM into gluteus maximus g) Both sexes, IV h) Both sexes, IM into vastus lateralis i) Both sexes, IM into gluteus maximus % recovery in 24 hr after 1 g. Healthy volunteers, 12 males (mean age 26 yr), 12 females (mean age 23 yr) HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; SOUTH AFRICA; SEX; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; URINE Sommers, D.K.; Walters, L.; Van Wyk, M.; Harding, S.M.; Paton, A.M.; Ayrton, J. 1983 Antimicrobial Agents and Chemotherapy 23(6):892-896				

Pyridinium, 4-(aminocarbonyl)-1-((2-carboxy-8-oxo-7-((phenylsulfoacetyl)amino)-5-thia-1-azab icyclo(4.3.0)oct-2-en-3-yl)methyl)-, hydroxide, inner salt, monsodium salt, (6R-(6alpha,7beta(R*)))-

62152-93-9

C22-H20-N4-O6-S2.Na

Tissue	Cases Exposure Route	Range	Mean	General Information
10851 Blood, plasma	a) 8 b) 5 c) 3 Injection	a) 30-70 ug/ml b) 55-140 ug/ml c) 70-120 ug/ml	a) 46 ug/ml b) 71 ug/ml c) 90 ug/ml	a) Immediately after 500 mg as 30 min IV every 6 hr for 10-22 d b) 1000 mg c) 1500 mg Ranges of peaks. Mean minimal inhibitory concentration of all organisms 7.5 ug/ml. Clinical response satisfactory in 9 cases. Some values estimated from figure. 13-22 yr old cystic fibrosis patients with P. AERUGINOSA respiratory tract infections, University of Virginia Medical Center, Pediatric Ward Bioassay
BLOOD PLASMA; SPUTUM; DELIBERATE EXPOSURE; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY Cabezudo, I.; Thompson, R.L.; Selden, R.F.; Guenthner, S.H.; Wenzel, R.P. 1984 Antimicrobial Agents and Chemotherapy 25(1):4-6				

Tissue	Cases Exposure Route	Range	Mean	General Information
10853 Blood, plasma	13 Injection	a) 230-470 ug/ml b) 5.5-31 ug/ml	a) 301.5+/-92.9 ug/ml b) 15.3+/-7.4 ug/ml	a) Peak, 0.5 hr after start of 3 g IV b) Trough, 6 hr after dose. 12-33 yr old cystic fibrosis patients HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADOLESCENTS; ADULTS; ANTIBIOTICS; CYSTIC FIBROSIS; DRUGS Reed, M.D.; Stern, R.C.; Yamashita, T.S.; Ackers, I.; Myers, C.M.; Blumer, J.L. 1984 Antimicrobial Agents and Chemotherapy 25(5):579-581				

Tissue	Cases Exposure Route	Range	Mean	General Information
10852 Sputum	Injection	<2-5 ug/ml	Not given	After 500, 1000 or 1500 mg dose as 30 min IV every 6 hr for 10-22 d Samples from 5 patients ranged above and below 2 ug/ml during the study. Levels from 2 patients remained <2 ug/ml. 13-22 yr old cystic fibrosis patients with P.AERUGINOSA respiratory tract infections, University of Virginia Medical Center, Pediatric Ward Bioassay
BLOOD PLASMA; SPUTUM; DELIBERATE EXPOSURE; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY Cabezudo, I.; Thompson, R.L.; Selden, R.F.; Guenthner, S.H.; Wenzel, R.P. 1984 Antimicrobial Agents and Chemotherapy 25(1):4-6				

Tissue	Cases Exposure Route	Range	Mean	General Information
10854 Urine	13 Injection	57-92% of dose	73.9+/-10.3% of dose	6 hr cumulative excretion after 3 g. 12-33 yr old cystic fibrosis patients HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADOLESCENTS; ADULTS; ANTIBIOTICS; CYSTIC FIBROSIS; DRUGS Reed, M.D.; Stern, R.C.; Yamashita, T.S.; Ackers, I.; Myers, C.M.; Blumer, J.L. 1984 Antimicrobial Agents and Chemotherapy 25(5):579-581				

Pyrido(2,3-d)pyrimidine-6-carboxylic acid, 8-ethyl-5,8-dihydro-5-oxo-2-(1-piperazinyl)-
51940-44-4
C14-H17-N5-O3
MW 303.33

Tissue	Cases Exposure Route	Range	Mean	General Information
10855 Blood, serum	16 Ingestion Injection	a) 1.23-0.11 ug/ml b) 0.84-0.15 ug/ml c) 3.83-0.28 ug/ml d) 4.27-0.5 ug/ml	a) Not given b) Not given c) Not given d) Not given	a) 1-8 hr after start of 100 mg IV, 6 cases b) 1.1-8 hr after 100 mg oral, 6 cases c) 1.14-12 hr after single 500 mg oral, 10 cases d) 1.2-12 hr, steady state, d 6, 500 mg oral 2x/d, 10 cases Ranges of means. Low points estimated from graph. Healthy volunteers, 22-30 yr HPLC

BLOOD SERUM; URINE; SALIVA; DELIBERATE EXPOSURE; ADULTS; DRUGS; ANTIBIOTICS; MEASUREMENT METHODS; BIOAVAILABILITY
Klinge, E.; Mannisto, P.T.; Mantyla, R.; Mattila, J.; Hanninen, U. 1984 Antimicrobial Agents and Chemotherapy 26(1):69-73

Tissue	Cases Exposure Route	Range	Mean	General Information
10856 Blood, serum	26 Ingestion	a) 2.5-0.1 ug/ml b) 3.2-0.1 ug/ml c) 2.5-0.4 ug/ml d) 3.5-0.1 ug/ml e) 3.5-0.2 ug/ml f) 3.5-0.5 ug/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) 500 mg tablet, 1-24 hr, peak (3.0 ug/ml) at 2 hr b) 500 mg suspension, 1-24 hr, peak (3.3 ug/ml) at 2 hr c) 2X500 mg tablets, 1-24 hr, peak (3.8 ug/ml) at 4 hr d) Middle-aged females, 1-24 hr, peak (3.0 ug/ml) at 2 hr after 500 mg tablet e) Elderly patients with normal renal function, 1-24 hr, peak (3.5 ug/ml) at 1 hr after 500 mg tablet f) Elderly patients with renal insufficiency, 1-24 hr, peak (4.1 ug/ml) at 2 hr after 500 mg tablet a-c) middle-age group. 8 middle-aged (33-51 yr old) female volunteers, 13 elderly (68-91 yr old) patients with renal insufficiency, 5 elderly (49-81) patients with normal renal function HPLC

BLOOD SERUM; URINE; DELIBERATE EXPOSURE; FINLAND; ADULTS; KIDNEY DISEASES; AGE; ANTIBIOTICS; BIOACCUMULATION; DRUGS; DRUG THERAPY
Mannisto, P.; Solkinen, A.; Mantyla, R.; Gordin, A.; Salo, H.; Hanninen, U. 1984 Xenobiotica 14(4):339-347

Tissue	Cases Exposure Route	Range	Mean	General Information
10857 Saliva	6 Ingestion Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.40+/-0.06 ug/ml b) 0.23+/-0.04 ug/ml c) 0.10+/-0.01 ug/ml d) 0.12+/-0.01 ug/ml e) 0.03+/-0.01 ug/ml f) 0.05+/-0.01 ug/ml	a) Peak, 1 hr, IV b) Peak, 1 hr, oral c) 2 hr, IV d) 2 hr, oral e) 4 hr, IV f) 4 hr, oral After 100 mg tablet, oral, or 100 mg IV infusion over 60 min. Healthy volunteers, 23-26 yr HPLC

BLOOD SERUM; DELIBERATE EXPOSURE; CASE HISTORIES; LIVER DISEASES; VITAMIN A; DRUGS; DRUG THERAPY
Walt, R.P.; Kemp, C.M.; Lyness, L.; Bird, A.C.; Sherlock, S. 1984 British Medical Journal 288:1030-1031

Pyrido(2,3-d)pyrimidine-6-carboxylic acid, 8-ethyl-5,8-dihydro-5-oxo-2-(1-piperazinyl)-
51940-44-4
C14-H17-N5-O3
MW 303.33

Tissue	Cases Exposure Route	Range	Mean	General Information
10858 Urine	26 Ingestion	a) 1100-40 ug/ml b) 700-30 ug/ml c) 1000-60 ug/ml d) 1100-40 ug/ml e) 450-80 ug/ml f) 300-90 ug/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) 500 mg tablet, 4-24 hr, peak (100 ug/ml) at 4 hr b) 500 mg suspension, 4-24 hr, peak (700 ug/ml) at 4 hr c) 2X500 mg tablets, 4-24 hr, peak (1000 ug/ml) at 4 hr d) Middle-aged females, 4-24 hr, peak (1100 ug/ml) at 4 hr, after 500 mg oral e) Elderly patients with normal renal function, 4-24 hr, peak (450 ug/ml) at 4 hr after 500 mg oral f) Elderly patients with renal insufficiency, 4-24 hr, peak (300 ug/ml) at 4 hr after 500 mg oral a-c) middle-age group. 8 middle-aged (33-51 yr old) female volunteers, 13 elderly (68-91 yr old) patients with renal insufficiency, 5 elderly (49-81) patients with normal renal function HPLC
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; FINLAND; ADULTS; KIDNEY DISEASES; AGE; ANTIBIOTICS; BIOACCUMULATION; DRUGS; DRUG THERAPY Manniste, P.; Seikinen, A.; Mantyla, R.; Gordin, A.; Salo, H.; Hanninen, U. 1984 Xenobiotica 14(4):339-347				

Tissue	Cases Exposure Route	Range	Mean	General Information
10859 Urine	16 Ingestion Injection	a) 350-35 ug/ml b) 300-33 ug/ml c) 900-90 ug/ml d) 1000-100 ug/ml	a) Not given b) Not given c) Not given d) Not given	a) 0-2 and 6-8 hr after start of 100 mg IV, 6 cases b) 0-2 and 6-8 hr after 100 mg oral, 6 cases c) 0-2 and 8-12 hr after single 500 mg oral, 10 cases d) 0-2 and 8-12 hr, steady state, d 6, 500 mg dose 2x/d, 10 cases Ranges of means, estimated from graph. Healthy volunteers, 22-30 yr HPLC
BLOOD SERUM; URINE; SALIVA; DELIBERATE EXPOSURE; ADULTS; DRUGS; ANTIBIOTICS; MEASUREMENT METHODS; BIOAVAILABILITY Klinge, E.; Manniste, P.T.; Mantyla, R.; Mattila, J.; Hanninen, U. 1984 Antimicrobial Agents and Chemotherapy 26(1):69-73				

Pyridoxol (8 CI); 3,4-Pyridinedimethanol, 5-hydroxy-6-methyl- (9 CI)
65-23-6
C8-H11-N-O3
MW 169.18, MP 160 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10860 Blood, serum	118 Ingestion	a) Not given b) Not given c) Not given	a) 9.58+/-5.33 ng/ml b) 11.60+/-5.35 ng/ml c) 60.47+/-53.35 ng/ml	a) 75 controls b) 36 with attention deficit disorder (ADD) prior to study c) After 12 wk of increasing doses from 200-600 mg/d Significant difference b), c) $p<0.001$. 9.94+/-1.87 yr old controls,(32 females, 36 males, 33.58+/-8.96 kg, IQ 116.07+/-11.7). 9.31+/-1.99 yr olds with ADD,6 females, 35, males, 30.78+/-11.02 kg, IQ 101.33+/-11.38 Nausea, anorexia, gagging and abdominal pain
BLOOD SERUM; DELIBERATE EXPOSURE; CANADA; CHILDREN; BEHAVIOR DISORDERS; VITAMINS; VITAMIN C; DRUGS Haslam, R.H.A.; Dalby, J.T.; Rademaker, A.W. 1984 Pediatrics 74(1):103-111				

Pyridoxol, hydrochloride (8 CI); 3,4-Pyridinedimethanol, 5-hydroxy-6-methyl-, hydrochloride (9 CI)
58-56-0
C8-H11-N-O3.Cl-H
MW 205.64, MP 206 C, also reported as 205-212 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10861 Blood, plasma	223 Ingestion	a) Not given b) Not given c) 27.5-46.9 pmol/ml d) 47.7-99.6 pmol/ml e) 8.6-18.2 pmol/ml f) 24.4-48.9 pmol/ml g) 73.6-97.9 pmol/ml h) 134.6-164.2 pmol/ml	a) 59.0+/-19.0 pmol/ml b) 37.1+/-25.3 pmol/ml c) Not given d) Not given e) 12.3+/-9.0 pmol/ml f) 36.3+/-25.0 pmol/ml g) 85.1+/-45.5 pmol/ml h) 152.7+/-54.3 pmol/ml	a) 26 non-pregnant controls, pre-study b) 196 pregnant subjects, pre-study c) 21 pregnant subjects 1.4-5.5 mg/d, 30 wk d) 28 pregnant subjects, 7.6-17.6 mg/d, 30 wk e) 11 subjects, 1.4-5.5 mg/d, at delivery f) 11 subjects, 7.6-17.6 mg/d, at delivery g) Cord plasma, mothers on 1.4-5.5 mg/d h) Cord plasma, mothers on 7.6-17.6 mg/d Ranges of means. Vitamin supplement was pyridoxine-HCl. Measured as pyridoxal-5'-phosphate. High and low intake groups significantly different. Low income, pregnant 17-38 yr olds in 18+/-4th wk of gestation. Non-pregnant controls. 1-min apgar scores higher in group with greater supplement Enzyme assay
FLORIDA; DELIBERATE EXPOSURE; BLOOD PLASMA; VITAMINS; BIOLOGICAL MONITORING; DIETS; PREGNANCY; TRANSPLACENTAL TRANSFER; METABOLITES; METABOLISM; DRUGS Schuster, K.; Bailey, L.B.; Mahan, C.S. 1984 Journal of Nutrition 114:977-986				

Pyrimidine, 2,4-diamino-5-(p-chlorophenyl)-6-ethyl- (8 CI); 2,4-Pyrimidinediamine, 5-(4-chlorophenyl)-6-ethyl- (9 CI)
58-14-0
C12-H13-Cl-N4
MW 248.71, MP 233-234 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10862 Blood, plasma	1 Ingestion	100-11 ng/ml	Not given	2 hr and 16 days after tablet of 25 mg pyrimethamine and 500 mg sulfadoxine. Estimated from graph. Female volunteer GC-EC
10863 Urine	1 Ingestion		14% % of dose	Within 24 hr after 25 mg. Excretion rate of about 50 ug/hr. Female volunteer GC-EC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; DRUGS; ANTITUMOR AGENTS; MEASUREMENT METHODS Midshov, O. 1984 Journal of Chromatography 306:388-393				

Pyrimidine, 2,4-diamino-5-(3,4,5,-trimethoxybensyl)- (8 CI); 2,4-Pyrimidinediamine, 5-((3,4,5-trimethoxyphenyl)methyl)- (9 CI)
738-70-5
C14-H18-N4-O3
MW 290.32, MP 199-203 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10864 Blood, serum	1 Ingestion	a) 2-1 ug/ml b) 4.2-2 ug/ml	a) Not given b) Not given	a) 1 and 8 hr after first dose. Level 83 ug/ml at 30 min b) 1 and 8 hr after fifteenth dose. Level 78 ug/ml at 30 min Levels typical of 14 adolescent and young adult patients given 160 mg, with 800 mg sulfamethoxazole, every 8 hr for 5 d. At steady state, average peak increased 1.9 ug/ml. Mean steady-state ratio of the two drugs 1/42. Dose adjustments needed for cystic fibrosis patients, due to shorter half-life and higher body clearance than reported in the literature for normal adults. Some values estimated from figure. Cystic fibrosis patient Spectrofluorometry
BLOOD SERUM; DELIBERATE EXPOSURE; ANTIBIOTICS; DRUGS; METABOLISM Reed, M.D.; Stern, R.C.; Bertino, J.S., Jr.; Myers, C.M.; Yamashita, T.S.; Blumer, J.L. 1984 Journal of Pediatrics 104(2):303-307				

Tissue	Cases Exposure Route	Range	Mean	General Information
10865 Blood, serum	8 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 2.28+/-0.42 mg/l b) 3.17+/-0.71 mg/l c) 3.05+/-0.72 mg/l d) 2.49+/-0.48 mg/l e) 2.18+/-0.61 mg/l f) 1.14+/-0.30 mg/l	a) Peak 1.0 hr after 200 mg b.i.d. for 5 d b) Peak 1.0 hr after 300 mg/d for 5 d c) Steady-state, 200 mg b.i.d. d) Steady-state, 300 mg/d e) Trough, 200 mg b.i.d. f) Trough, 300 mg/d Troughs from 300 mg/d regimen did not exceed minimum inhibitory concentration (>2 mg/d) considered clinically desirable. Healthy volunteers, 5 males, 3 females, 25-53 yr old (mean 30.5 yr) Headache HPLC

(next page)

Pyrimidine, 2,4-diamino-5-(3,4,5,-trimethoxybensyl)- (8 CI); 2,4-Pyrimidinediamine, 5-((3,4,5-trimethoxyphenyl)methyl)- (9 CI)
738-70-5
C14-H18-N4-O3
MW 290.32, MP 199-203 C

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
10866 Urine	6 Ingestion	a) 491-640 mg b) 402-581 mg	a) 575 mg b) 497 mg	a) 200 mg b.i.d. for 5 d b) 300 mg/d for 5 d Cumulative excretion 96 hr after regimen. Minimum inhibitory concentration maintained for both regimens. Healthy volunteers, 5 males, 3 females, 25-53 yr old (mean 30.5 yr) Headache HPLC
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ADULTS; INFECTION; ANTIBIOTICS; DRUG THERAPY; DRUGS; BIOACCUMULATION				
Watson, I.D.; Stewart, M.J.; Wiles, A.; McIntosh, S.J. 1983 Journal of International Medical Research 11:137-144				

Pyrrole-2-acetic acid, 5-(p-chlorobensoyl)-1,4-dimethyl- (8 CI); 1H-Pyrrole-2-acetic acid, 5-(4-chlorobensoyl)-1,4-dimethyl- (9 CI)
53369-31-2
C15-H14-Cl-N-O3
MW 291.75

Tissue	Cases Exposure Route	Range	Mean	General Information
10867 Blood	1 Ingestion	Not given	8.5 ug/ml	Autopsy. Dose unknown. Combined levels of ethanol, methanol and isopropanol <5 mg/dl. Data also for clomipramine, caffeine, salicylates, acetaminophen, indomethacin, oxycodone, lorazepam. 57 yr old treated for depression, joint pain. Excessive drinking on occasion. Confusion, weakness, intoxication, death. No evidence of zomepirac toxicity. Death due to clomipramine. HPLC
AUTOPSIES; BEHAVIOR DISORDERS; NEUROLOGIC MANIFESTATIONS; BLOOD; URINE; ANTIDEPRESSIVE AGENTS; ANALGESICS; DRUGS; DRUG ABUSE; ALCOHOLS; METABOLITES; CASE HISTORIES; DELIBERATE EXPOSURE				
Meatherall, R.C.; Guay, D.R.P.; Chalmers, J.L.; Keenan, J.R. 1983 Journal of Analytical Toxicology 7:168-171				

Tissue	Cases Exposure Route	Range	Mean	General Information
10868 Blood	1 Ingestion	a) Not applicable b) Not applicable	a) 286 mg/l b) 152 mg/l	a) Antemortem, 9 hr prior to death b) Postmortem, 7.5 hr after death 177 mg/kg dose. 38 yr old paraplegic Death from overdose of Zomax UV spectrophotom; GC
BLOOD; ADULTS; SUICIDE; DRUG ABUSE; DRUGS; ANTIINFLAMMATORY AGENTS; FORENSIC MEDICINE; BIOACCUMULATION; HEALTH HAZARDS				
Backer, R.C.; Kshirsagar, V.H.; Sopher, I.M. 1983 Journal of Analytical Toxicology 7:223-224				

Pyrrole-2-acetic acid, 5-(p-chlorobenzoyl)-1,4-dimethyl- (8 CI); 1H-Pyrrole-2-acetic acid, 5-(4-chlorobenzoyl)-1,4-dimethyl- (9 CI)
38369-31-3
C15-H14-Cl-N-O3
MW 291.75

Tissue	Cases Exposure Route	Range	Mean	General Information
10869 Blood, plasma	12 Ingestion	a) Not given b) Not given	a) 3.5+/-1.9 ug/ml b) 2.0+/-0.8 ug/ml	a) 1.2+/-0.5 hr after sigle 100 mg dose, day 1 b) 1.6+/-0.9 hr after 100 mg zomepirac and 975 mg aspirin, day 5. Day 2-4, 975 mg aspirin 4X/d Significant difference (p=0.05). 28+/-5 yr old healthy volunteers HPLC
10870 Urine	12 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 13.4+/-3.0 mg b) 79.1+/-9.5 c) 15.5+/-6.0 mg d) 66.5+/-9.0 mg	a) Total for 24 hr after single 100 mg dose. Day 1. Unchanged zomepirac b) Unchanged zomepirac + zomepirac glucuronide. Same regimen as a) c) Total for 24 hr after 100 mg and 975 mg asprin, day 5. Unchanged zomepirac d) Unchanged zomepirac + zomepirac glucuronide. Same regimen as c) Day 2-4, 975 mg asprin 4X/d. Significant difference, b) and d) (p=0.05). 28+/-5 yr old healthy volunteers HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; ANALGESICS; ANTIINFLAMMATORY AGENTS; COMPARATIVE EVALUATIONS; DRUGS Desiraju, R.K.; Nayak, R.K.; Pritchard, J.P. 1984 Journal of Clinical Pharmacology 24:371-380				

Pyrrolidinium, 2-(diphenylmethylene)-1,1-diethyl-2-methyl-, bromide
4630-35-9
C22-H28-N.Br
MW 386.89, MP 216-218 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10871 Blood, serum	6 Injection Ingestion	a) 62.5-3.0 ng/ml b) 3.5-1.0 ng/ml	a) Not applicable b) Not applicable	a) 15 min-8 hr, rapid decline from 62.5-36.5 ng/ml in 1 hr, moderate decline thereafter, after 7.5 mg IV b) 1-8 hr, peak (10.8+/-1.3 ng/ml) 2.7+/-0.2 hr after 60 mg oral. Healthy volunteers, 32-50 yr old HPLC
10872 Urine	6 Injection Ingestion	a) Not given b) Not given	a) 47.81+/-3.35% b) 1.36+/-0.15%	a) 7.5 mg IV b) 60 mg oral % dose recovered in 24 hr. Healthy volunteers, 32-50 yr old HPLC
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ADULTS; GASTROINTESTINAL DISEASES; AUTONOMIC DRUGS; DRUGS; DRUG THERAPY; BIOACCUMULATION Noguchi, N.; Tokuma, Y.; Tamura, Y. 1983 International Journal of Clinical Pharmacology, Therapy and Toxicology 21(5):213-217				

Quinidine (8 CI); Cinchonan-9-ol, 6'-methoxy-, (9S)- (9 CI)
56-54-2
C20-H24-N2-O2
MW 324.41, MP 174-175 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10873 Blood	a) 2 b) 10	a) 43-48 mg/l b) 0.49-8.0 mg/l	a) 46 mg/l b) 4.3 mg/l	a) Single-drug deaths 1975-1980 b) Non-drug related deaths, 1975-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooke, C.R. 1983 Journal of Analytical Toxicology 7:226-230				

Tissue	Cases Exposure Route	Range	Mean	General Information
10874 Blood, serum	6	1.4-3.0 ug/ml	2.4 ug/ml	Trough, patients with at least 70% reduction in ventricular ectopic frequency. Study included patients whose serum levels were not reported. 6 of 13 patients responded favorably. Patients with ventricular ectopy Diarrhea, rash, drug fever
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; ANTIARRHYTHMIC AGENTS; DRUGS; DRUG THERAPY; BIOACCUMULATION; COMPARATIVE EVALUATIONS Feuster, P.E.; Hanson, C.D. 1983 Clinical Pharmacology and Therapeutics 34(2):136-143				

Tissue	Cases Exposure Route	Range	Mean	General Information
10875 Blood, serum	a) 11 b) 9 c) 4 Ingestion	a) 0.02-0.10 ug% b) 0.01-0.12+/-0.01 ug/ml c) 0.002+/-0.002-0.10+/-0.04 ug/ml	a) Not applicable b) Not applicable c) Not applicable	a) Controls, 0.5-5 hrs, peak (0.10+/-0.01 ug%) at 3 hrs after 250 mg as theophylline ethanoate b) Patients with cardiac insufficiency, 0.5-5 hrs, peak (0.12 ug/ml) 5 hrs after 250 mg as theophylline ethanoate plus digoxin pretreatment c) Patients without cardiac insufficiency, 0.5-5 hrs, peak (0.10+/-0.04 ug/ml) 5 hrs after 250 mg as theophylline ethanoate plus digoxin pretreatment. 20-80 yr old healthy volunteers and patients Fluormetric
BLOOD SERUM; DELIBERATE EXPOSURE; ITALY; ADULTS; CARDIOVASCULAR DISEASES; HEART DISEASES; ANTIARRHYTHMIC AGENTS; DRUGS; DRUG THERAPY; BIOACCUMULATION Iacono, A.; Aiello, C.; Gualtieri, S.; Iarussi, D.; Matera, M.G.; De Carlo, R.; De Marco, G.; Imperatore, A.; Marmo, E. 1983 Current Therapeutic Research 33(3):579-588				

Quinidine (8 CI); Cinchonan-9-ol, 6'-methoxy-, (9S)- (9 CI)
56-54-2
C20-H24-N2-O2
MW 324.41, MP 174-175 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10676 Blood, serum	a) 8 b) 5 c) 4 d) 1 Ingestion	a) 1.01-1.55 ug/ml b) 1.65-3.07 ug/ml c) 4.25-6.17 ug/ml d) 8.09-2.82 ug/ml	a) 1.16+/-0.17 ug/ml b) 2.33+/-0.60 ug/ml c) 5.06+/-0.99 ug/ml d) Not applicable	a) Peak 2.0 hr after 200 mg b) Steady-state at 2.0+/-0.7 hr after 300 mg c) Steady-state at 1.45+/-0.55 hr after 300 mg d) 0-6 hr, peak (4.25 ug/ml) at 1 hr after 300 mg. Patients with ventricular arrhythmia, 50-81 yr old. Hospitalized in Baltimore V.A. Medical Center HPLC
10677 Saliva	a) 8 b) 5 c) 4 d) 1 Ingestion	a) 0.37-0.52 ug/ml b) 0.74-4.57 ug/ml c) 1.42-11.20 ug/ml d) 3.43-4.90 ug/ml	a) 0.44+/-0.07 ug/ml b) 2.76+/-1.80 ug/ml c) 5.75+/-4.50 ug/ml d) Not applicable	a) Peak 2.0 hr after 200 mg b) Steady-state at 2.12+/-0.26 hr after 300 mg c) Steady-state at 1.06+/-0.76 hr after 300 mg d) 0-6 hr, peak (11.20 ug/ml) at 2 hr after 300 mg. Patients with ventricular arrhythmia, 50-81 yr old. Hospitalized in Baltimore V.A. Medical Center HPLC

BLOOD SERUM; SALIVA; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; CARDIOVASCULAR DISEASES; ANTIARRHYTHMIC AGENTS; DRUG THERAPY; DRUGS; BIOACCUMULATION
Narang, P.K.; Carliner, N.H.; Fisher, M.L.; Crouthamel, W.G. 1983 Clinical Parmacology and Therapeutics 34(5):695-702

Quinidine, sulfate (2:1) (salt) (8 CI); Cinchonan-9-ol, 6'-methoxy-, (9S)-, sulfate (2:1) (salt) (9 CI)
50-54-4
C20-H24-N2-O2.1/2H2-O4-S
MW 746.93

Tissue	Cases Exposure Route	Range	Mean	General Information
10676 Blood, plasma	4 Ingestion	Not given	1.54+/-0.29 ug/ml	Peak 0.5-2 hr after 200 mg New assay. Healthy volunteers, 28-37 yr old, wt 51-67 kg HPLC

BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; DISEASES; CARDIOVASCULAR DISEASES; ANTIARRHYTHMIC AGENTS; DRUGS; DRUG THERAPY; DRUG INTERACTION; BIOACCUMULATION
Mori, R.; Okumura, K.; Inui, K.-I.; Yasuhara, M.; Yamada, K.; Sakurai, T.; Kawai, C. 1984 Journal of Pharmacy and Pharmacology 36:202-204

Quinine (8 CI); Cinchonan-9-ol, 6'-methoxy-, (8alpha,9R)- (9 CI)
130-95-0
C20-H24-N2-O2
MW 324.46

Tissue	Cases Exposure Route	Range	Mean	General Information
10670 Blood	a) 58 b) 1	a) 0.6-180 mg/l b) Not applicable	a) 1.5 mg/l b) 5.3 mg/l	a) Non-drug related deaths, 1975-1980 b) Multiple-drug related death, 1979-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1988 Journal of Analytical Toxicology 7:225-230				

Tissue	Cases Exposure Route	Range	Mean	General Information
10680 Lung	a) 242 b) 148 c) 50	a) Not given b) Not given c) Not given	a) 0.40 mg/100 g b) 0.20 mg/100 g c) 0.40 mg/100 g	a) Heroin-related deaths b) Control group c) Morphine-positive control group Members of a) group died from heroin overdose, b) group from natural or traumatic causes but with either cutaneous stigmata of IV narcotic use or positive blood morphine levels, and c) group is the morphine-positive subset of b) group. Study found ethanol use and quinine content of injectable drug both associated with heroin overdose. Autopsies 1/80-12/82, 30 or 31 yr olds GC
BLOOD; LUNGS; BILE; URINE; DELIBERATE EXPOSURE; ADULTS; DRUG ABUSE; NARCOTICS; AUTOPSIES; BIOACCUMULATION; HEALTH HAZARDS; DRUGS Ruttenber, A.J.; Luke, J.L. 1984 Science 226:14-20				

Quinoline, 7-chloro-4-((4-(diethylamino)-1-methylbutyl)amino)- (8 CI); 1,4-Pentanediamine, N(4)-(7-chloro-4-quinolinyl)-N(1),N(1)-diethyl- (9 CI)
54-05-7
C18-H26-Cl-N3
MW 319.89, MP 87 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10681 Blood, cells	12 Ingestion	a) Not given b) Not given	a) 2272+/-1042 nmol/l b) 1586+/-737 nmol/l	a) After 9 d of 2 mg/kg b) Main metabolite, monodesethylchloroquine, after 9 d of 2 mg/kg Comparative uptake of two drugs has variations 5 to 20X. Additional data for malarial patients show individual variations in drug metabolism. Healthy volunteers
BLOOD; BLOOD PLASMA; DELIBERATE EXPOSURE; MALARIA; DRUGS Verdier, F.; Le Bras, J.; Calvier, F.; Hatin, I. 1984 Lancet 1(8387):1186-1187				

Quinoline, 7-chloro-4-((4-(diethylamino)-1-methylbutyl)amino)- (8 CI); 1,4-Pentanediamine, N(4)-(7-chloro-4-quinolinyl)-N(1),N(1)-diethyl- (9 CI)
54-05-7
C18-H26-Cl-N3
MW 319.89, MP 87 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10882 Blood, plasma	176	a) 190-40 ug/L b) 110-35 ug/L c) 205-40 ug/L	Not given	a) 18 hr and 14 d. Received 1 gm in 1 d b) 18 hr and 14 d. Received 1.5 gm during 4 d c) 18 hr and 18 d. Received 2.0 gm during 7 d Estimated from graph. Minimal effective level, 10 ug/L. "Landmark Article" first published in 1946 Military malaria patients, Moore General Hospital, Swannanoa, NC. Acquired disease in Pacific or Mediterranean

BLOOD PLASMA; DELIBERATE EXPOSURE; NORTH CAROLINA; COMPARATIVE EVALUATIONS; DRUGS
Most, H.; London, I.M.; Kane, C.A.; Lavietes, P.H.; Schroeder, E.F.; Hayman, J.M., Jr.; 1964 Journal of the American Medical Association 251(18):2415-2419

Tissue	Cases Exposure Route	Range	Mean	General Information
10888 Blood, plasma	12 Ingestion	a) Not given b) Not given	a) 274+/-120 nmol/l b) 191+/-63 nmol/l	a) After 9 d of 2 mg/kg b) Main metabolite, monodesethylchloroquine, after 9 d of 2 mg/kg Additional data for malarial patients show individual variations in drug metabolism. Healthy volunteers

BLOOD; BLOOD PLASMA; DELIBERATE EXPOSURE; MALARIA; DRUGS
Verdier, F.; Le Bras, J.; Calvier, F.; Hatin, I. 1984 Lancet 1(8387):1186-1187

Tissue	Cases Exposure Route	Range	Mean	General Information
10884 Blood, serum	7 Ingestion	50-520 ng/ml	Not given	At admission, before administration of drug and followup. Levels not measured after treatment. 2 additional cases had levels of 0. Children using the drug for malaria. Presented with fever, anemia, 4 with convulsions, 2 with hemolysis. Parasite clearance by 72 hr HPLC

CHILDREN; GHANA; DRUGS; DELIBERATE EXPOSURE
Ofori-Adjei, D.; Commey, J.O.O.; Adjepon-Yamoah, K.K 1984 Lancet 1(8388):1246

Quinoline, 7-chloro-4-((4-(diethylamino)-1-methylbutyl)amino)- (8 CI); 1,4-Pentanediamine, N(4)-(7-chloro-4-quinolinyl)-N(1),N(1)-diethyl- (9 CI)
54-05-7
C18-H26-Cl-N3
MW 319.89, MP 87 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10885 Blood, serum	a) 2 b) 5 c) 5 d) 5 e) 5 f) 5 Ingestion	a) 38-70 nmol/l b) 341-1278 nmol/l c) 834-1426 nmol/l d) 35-165 nmol/l e) 104-245 nmol/l f) 272-528 nmol/l	a) 53 nmol/l b) 721 nmol/l c) 1171 nmol/l d) 79 nmol/l e) 177 nmol/l f) 423 nmol/l	a) 3 hr after 2 mg/kg b) 3 hr after 10 mg/kg c) 3 hr after 15 mg/kg d) Desethyl metabolite, 3 hr after 2-5 mg/kg e) Desethyl metabolite, 3 hr after 10 mg/kg f) Desethyl metabolite, 3 hr after 15 mg/kg. Healthy volunteer, 18-64 yr old HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; SWEDEN; ADULTS; DRUGS; DRUG THERAPY; BIOACCUMULATION; METABOLITES Gustafsson, L.L.; Rombo, L.; Alvan, G.; Bjorkman, A.; Lind, M.; Walker, O. 1983 Clinical Pharmacology and Therapeutics 34(3):383-385				

Tissue	Cases Exposure Route	Range	Mean	General Information
10886 Blood, whole	12 Ingestion	a) Not given b) Not given	a) 1269+/-475 nmol/l b) 775+/-333 nmol/l	a) After 9 d of 2 mg/kg b) Main metabolite, monodesethylchloroquine, after 9 d of 2 mg/kg Ratio of two drugs varies between 0.51 and 1.19. Additional data for malarial patients show individual variations in drug metabolism. Healthy volunteers
BLOOD; BLOOD PLASMA; DELIBERATE EXPOSURE; MALARIA; DRUGS Verdier, F.; Le Bras, J.; Calvier, F.; Hatin, I. 1984 Lancet 1(8387):1186-1187				

Tissue	Cases Exposure Route	Range	Mean	General Information
10887 Hair	a) 1 b) 1 c) 1 d) 1 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 310 mg/kg b) 145 mg/kg c) 23 mg/kg d) 11 mg/kg	a) 100 mg/d, 6 d/wk for 3 yrs, adult b) 100 mg/d, 6 d/wk for several months, adolescent c) Monodesethyl metabolite, 100 mg/d, 6 d/wk for 3 yrs, adult d) Monodesethyl metabolite, 100 mg/d, 6 d/wk for several months, adolescent. Patients (1 male, 1 female) undergoing malaria treatment GC/MS
HAIR; DELIBERATE EXPOSURE; ADOLESCENTS; ADULTS; FRANCE; INFECTION; DRUGS; DRUG THERAPY; BIOACCUMULATION; FORENSIC MEDICINE; AGE Viala, A.; Deturmeny, E.; Aubert, C.; Estadieu, M.; Durand, A.; Cano, J.P.; Delmont, J. 1983 Journal of Forensic Sciences 28(4):922-928				

Quinoline, 8-((4-amino-1-methylbutyl)amino)-6-methoxy- (8 CI); 1,4-Pentanediamine, N(4)-(6-methoxy-8-quinolinyl)- (9 CI)
90-34-6
C15-H21-N3-O
MW 259.84, BP 175-179 C at 0.2 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10888 Blood, plasma	2 Ingestion	a) 222.5-0 ng/ml b) 5.25-1.4 ug/ml c) 600-0 ng/ml	a) Not applicable b) Not applicable c) Not applicable	a) Primaquine, peak (2.25 hr) and 12 hr b) Metabolite (III), peak (2.25 hr) and 36 hr c) More polar, metabolite, peak (2.5 hr) and 8 hr 60 or 90 mg oral dose as diphosphate. Ranges of means. Estimated from graph. Healthy males HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; MEASUREMENT METHODS; BIOLOGICAL MONITORING; METABOLITES; URINE; DRUGS Parkhurst, G.W.; Nora, M.V.; Thomas, R.W.; Carson, P.E. 1984 Journal of Pharmaceutical Sciences 73(9):1329-1331				

Tissue	Cases Exposure Route	Range	Mean	General Information
10889 Blood, plasma	4 Ingestion	Not given	150.2+/-28.0 ng/ml	Peak 3.6 hr after single 45 mg dose. Overnight fast prior to dose. New method. 24-45 yr old healthy volunteers HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; DRUGS; MEASUREMENT METHODS Ward, S.A.; Edwards, G.; Orme, M.L'E.; Breckenridge, A.M. 1984 Journal of Chromatography 305:289:248				

Tissue	Cases Exposure Route	Range	Mean	General Information
10890 Urine	2 Ingestion	Not applicable	5.2%	% of dose excreted as unchanged drug in 24 hr after 60 or 90 mg oral dose as diphosphate. Chromatographic evidence for 2 unidentified metabolites. Healthy males HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; MEASUREMENT METHODS; BIOLOGICAL MONITORING; METABOLITES; URINE; DRUGS Parkhurst, G.W.; Nora, M.V.; Thomas, R.W.; Carson, P.E. 1984 Journal of Pharmaceutical Sciences 73(9):1329-1331				

Riboflavin
83-88-5
C17-H20-N4-O6
MW 376.36, MP 278-282 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10891 Urine	42 Ingestion	a) 0.826-0.859 mg b) 2.62-2.66 mg c) 3.46-3.70 mg /g creatinine S.E.	a) 0.835+/-0.001 mg b) 2.62+/-0.02 mg c) 3.51+/-0.07 mg /g creatinine S.E.	a) Before supplement b) 4 d after supplement of 5 mg/d c) 7 d after supplement of 5 mg/d Ranges of means. Limited value in assessing status. Erythrocyte glutathione reductase activity coefficient also measured before (mean 1.26) and after (mean 1.08) supplement, >1.30 suggestive of biochemical ariboflavinosis. Nigerian 10-18 yr olds, wt 31.2-62.6 kg, ht 138.8-174.3 cm. Fluorometry
ERYTHROCYTES; URINE; DELIBERATE EXPOSURE; NIGERIA; ADOLESCENTS; NUTRITIONAL DEFICIENCIES; VITAMINS; DIETS Ajayi, O.A.; James, O.A. 1984 American Journal of Clinical Nutrition 39:787-791				

Ricin
9009-86-3
EXACT COMPOSITION UNKNOWN OR UNDETERMINED
MW approximately 65,000

Tissue	Cases Exposure Route	Range	Mean	General Information
10882 Blood, plasma	19 Injection	a) 2000-10,000 pg/ml b) 20-30 pg/ml	a) Not given b) Not given	a) 3 hr after 14-23 ug/sq m body surface area b) 24 hr after administration Administered IV biweekly, starting dose 4.5 ug/sq m, increased in increments of 1-2 ug/sq m. 1 patient had partial response, 8 had stable disease after previous progression. Antibody formation induced by about 3 wk. Phase II trial planned at 23 ug dose. Values estimated from graph. 17-81 yr old cancer patients, no longer candidates for conventional therapy, Norway Relatively mild side effects in most patients. Flu-like symptoms at 20 ug/sqm. Vomiting 1-2 d in 4 cases. 1 who previously used related toxic proteins developed transient allergic symptoms ELISA
BLOOD PLASMA; DELIBERATE EXPOSURE; NORWAY; CARCINOMAS; MELANOMAS; SARCOMAS; NEOPLASMS; ANTITUMOR AGENTS; DRUGS; CHEMOTHERAPY; PROTEINS Fodstad, O.; Kvalheim, G.; Godal, A.; Lotsberg, J.; Aamdal, S.; Host, H.; Pihl, A. 1984 Cancer Research 44:862-865				

s-Triazolo(4,3-a)pyridin-3(2H)-one, 2-(3-(4-(m-chlorophenyl)-1-piperazinyl)propyl)- (9 CI); 1,2,4-Triazolo(4,3-a)pyridin-3(2H)-one, 2-(3-(4-(3-chlorophenyl)-1-piperazinyl)propyl- (9 CI)
19794-93-5
C19-H22-Cl-N5-O
MW 371.88, MP 86-87 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10698 Blood	a) 1 b) 1 Ingestion	a) Not applicable b) Not applicable	a) 25.7 mg/L b) 9.60 mg/L	a) Female, collapsed 2 hr after 4-8 g, survived, gastric contents 7.33 mg/L b) Male, died 2 hr after unknown intake of multiple drugs, gastric contents 611 mg/L. 40 yr old female, 21 yr old male, with chronic depression In a) lethargy, hypotension, pale and dry skin, pupils fixed, respiration shallow In b) combined drug toxicity with pulmonary congestion, hemorrhage, edema, cerebral edema HPLC
CASE HISTORIES; DELIBERATE EXPOSURE; AUTOPSIES; SUICIDE; ANTIDEPRESSIVE AGENTS; DRUGS; DRUG ABUSE; BLOOD; URINE Root, I.; Ohlson, G.B. 1984 Journal of Analytical Toxicology 8:91-94				

Tissue	Cases Exposure Route	Range	Mean	General Information
10694 Blood, plasma	a) 26 b) 2 c) 2	a) 73-1678 ug/l b) 1068-1063 ug/l c) Not given	a) 629 ug/l b) 1060.5 ug/l c) 5000 ug/l	a) 12 hr after 50-300 mg, given 2-3/d for at least 3 d (considered steady-state concentration) b) After 300 mg/d for at least 3 d, in geriatric patients c) In overdose patients. Patients under treatment for depression, and overdose cases, United States LC
BLOOD PLASMA; DELIBERATE EXPOSURE; DEPRESSION; ANTIDEPRESSIVE AGENTS; DRUGS; DRUG THERAPY Wong, S.H.Y.; Waugh, S.W.; Draz, M.; Jain, N. 1984 Clinical Chemistry 30(2):230-233				

Tissue	Cases Exposure Route	Range	Mean	General Information
10695 Urine	a) 1 b) 1 Ingestion	Not applicable	4.5 mg/L	Collapsed 2 hr after 4-8 g, survived, gastric contents 7.33 mg/L. 40 yr old female with chronic depression Lethargy, hypotension, pale and dry skin, pupils fixed, respiration shallow HPLC
CASE HISTORIES; DELIBERATE EXPOSURE; AUTOPSIES; SUICIDE; ANTIDEPRESSIVE AGENTS; DRUGS; DRUG ABUSE; BLOOD; URINE Root, I.; Ohlson, G.B. 1984 Journal of Analytical Toxicology 8:91-94				

s-Trioxane, 2,4,6-trimethyl- (8 CI); 1,3,5-Trioxane, 2,4,6-trimethyl- (9 CI)
123-63-7
C6-H12-O3
MW 132.16, MP 12.6 C, BP about 124 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10696 Blood	9 Injection	1.16+/-0.14-3.07+/-0.11 L/kg	1.78+/-0.20 L/kg	Mean volume of distribution. Dose: 150 mg/kg/hr IV for 8 hr. Also given phenobarbital (all) & phenytoin (4 cases). 106+/-57 hr old term newborns (3210+/-190 gm) with status epilepticus GC
BLOOD; DELIBERATE EXPOSURE; NEWBORN; NERVOUS SYSTEM DISEASES; ANTICONVULSANTS; DRUGS; DRUG THERAPY Giacoia, G.P.; Gessner, P.K.; Salesha, M.M.; Boutwell, W.C. 1984 Journal of Pediatrics 104(2):291-296				

Salicylic acid (8 CI); Benzoic acid, 2-hydroxy- (9 CI)
69-72-7
C7-H6-O3
MW 138.12, MP 157-159 C, BP about 211 C at 20 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10697 Blood, plasma	12 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 168+/-36.8 ug/ml b) 3.6+/-0.8 ug/ml c) 186+/-41.3 ug/ml d) 3.8+/-0.8 ug/ml e) 141 ug/ml f) 146 ug/ml	a) 1.8+/-0.61 hr after 975 mg aspirin, d 4, 1st dose b) Salicyluric acid (major metabolite) 1.0+/-1.7 hr after same dose as a) c) 1.7+/-0.96 hr after 975 mg aspirin and 100 mg zomepirac, d 5 d) Salicyluric acid, 1.8+/-1.8 hr after same dose as c) e) Predose, d 4 f) Predose, d 5 d 1, 100 mg zomepirac, d 2-4, 975 mg aspirin 4X/d. Significant difference a) & c) (p=0.05). 28+/-5 yr old healthy volunteers HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; ANALGESICS; ANTIINFLAMMATORY AGENTS; COMPARATIVE EVALUATIONS; DRUGS Desiraju, R.K.; Nayak, R.K.; Pritchard, J.P. 1984 Journal of Clinical Pharmacology 24:371-380				

Tissue	Cases Exposure Route	Range	Mean	General Information
10698 Blood, plasma	12 Ingestion	a) 1.03-21.8 ug/ml b) 0.71-20.2 ug/ml c) 0.73-17.2 ug/ml	a) Not applicable b) Not applicable c) Not applicable	a) Na+ solution dosage form b) K+ solution c) Tablet Lows in all cases at 0.08 hr, maxima at 0.59, 0.75, 1.50 hr, respectively. Amount aspirin given 324, 324, 325 mg, respectively. Ranges of means. Healthy volunteers, 21-37 yr old, wt 53.6-94.5 kg HPLC
DELIBERATE EXPOSURE; DRUGS; ANALGESICS; COMPARATIVE EVALUATIONS; BLOOD PLASMA; URINE; BIOAVAILABILITY Mason, W.D. 1984 Journal of Pharmaceutical Sciences 73(7):898-899				

Salicylic acid (8 CI); Benzoic acid, 2-hydroxy- (9 CI)
69-72-7
C7-H6-O3
MW 138.12, MP 157-160 C, BP about 211 C at 20 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10800 Blood, plasma	6 Ingestion	a) Not given b) Not given c) Not given	a) 298.5+/-88.8 umol/l b) 326.8+/-66.7 umol/l c) 380.4+/-128.9 umol/l	a) 2.90+/-0.88 hr after 600 mg compressed aspirin b) 3.18+/-0.84 hr after 650 mg Bufferin c) 1.58+/-0.92 hr after 600 mg Asprociear Peaks Normal 20-42 yr olds Inhibition of platelet aggregation, all preparations HPLC
AUSTRALIA; ADULTS; BLOOD PLASMA; ANTICOAGULANTS; COMPARATIVE EVALUATIONS; DRUGS; DELIBERATE EXPOSURE Siebert, D.J.; Bochner, F.; Imhoff, D.M.; Watts, S.; Lloyd, J.V.; Field, J.; Gabb, B.W. 1988 Clinical Pharmacology and Therapeutics 33(3):367-374				

Tissue	Cases Exposure Route	Range	Mean	General Information
10800 Blood, plasma	12 Ingestion	a) Not given b) Not given c) Not given	a) 56.79+/-5.38 mg/l b) 54.17+/-3.72 mg/l c) 56.35+/-4.91 mg/l	a) Peak 3.00+/-0.74 hr after 650 mg unbuffered aspirin b) Peak 1.25+/-0.32 hr after 640 mg aspirin with 16 meq buffer c) Peak 1.15+/-0.34 hr after 648 mg aspirin with 34 meq buffer Dosage given 1 hr after 458 calorie meal. Healthy volunteers, 21-27 yr old, wt 56.0-88.6 kg
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; ANALGESICS; ANTIPYRETICS; DRUGS; DRUG THERAPY; DIETS; BIOACCUMULATION Mason, W.D.; Winer, N. 1988 Journal of Pharmaceutical Sciences 72(7):819-821				

Tissue	Cases Exposure Route	Range	Mean	General Information
10801 Urine	12 Ingestion	a) Not applicable b) Not applicable c) Not applicable	a) 28.7 mg b) 20.2 mg c) 17.1 mg	a) Na+ solution dosage form b) Kt solution c) Tablet Accumulation in 10 hr. Amount aspirin given 324, 324 and 325 mg, respectively. Healthy volunteers, 21-37 yr old, wt 53.6-94.5 kg HPLC
DELIBERATE EXPOSURE; DRUGS; ANALGESICS; COMPARATIVE EVALUATIONS; BLOOD PLASMA; URINE; BIOAVAILABILITY Mason, W.D. 1984 Journal of Pharmaceutical Sciences 73(7):998-999				

Salicylic acid acetate (8 CI); Benzoic acid, 2-(acetyloxy)- (9 CI)
50-78-2
C9-H8-O4
MW 180.2, MP 135 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10002 Blood	1 Ingestion	Not applicable	40 ug/mL	Postmortem measurement. Victim drowned while in advanced stage of intoxication after having also taken 30 aspirin and 11 Halcion tablets. Level within therapeutic range. 79 yr old male suicide victim, NZ HPLC
DRUGS; DELIBERATE EXPOSURE; HYPNOTICS; SUICIDE; ALCOHOLS; NEW ZEALAND; BLOOD				
Wong, R.J. 1984 Journal of Analytical Toxicology 8:10-13				

Tissue	Cases Exposure Route	Range	Mean	General Information
10008 Blood, plasma	5 Injection Ingestion	a) 1.8-0.68 ug/ml b) 0.3-0.6 ug/ml c) 2.3-0.1 ug/ml d) 1.8-0.4 ug/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 0-60 min, peak (1.8 ug/ml) at 5 min, after 40 mg, IV b) 10-75 min, peak (3.5 ug/ml) at 20 min, after 325 mg, oral c) 0-60 min, peak (2.2 ug/ml) at 5 min, after 40 mg, IV. Maintainance dose 325 mg/8 hr for 7 d prior to experiment d) 15-75 min, peak (3.0 ug/ml) at 25 min, after 325 mg, oral. Maintainance dose of 325 mg/8 hr for 7 d prior to experiment No differences reported. Healthy non-smokers GC; MS
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; ANALGESICS; ANTIPYRETICS; DRUG THERAPY; DRUGS; BIOACCUMULATION; BIOAVAILABILITY				
Pedersen, A.K.; FitzGerald, G.A. 1984 New England Journal of Medicine 311(9):1206-1211				

Tissue	Cases Exposure Route	Range	Mean	General Information
10004 Blood, plasma	12 Ingestion	a) 0.80-7.20 ug/ml b) 0.80-8.27 ug/ml c) 0.80-6.76 ug/ml	a) Not applicable b) Not applicable c) Not applicable	a) Na+ solution dosage form b) K+ solution c) Tablet Lows in all cases at 120 min, maxima at 17.5, 30.4 and 26.7 min, respectively. Amount aspirin 324, 324, and 325 mg, respectively. Ranges of means. Healthy volunteers, 21-37 yr old, wt 53.6-94.5 kg HPLC
DELIBERATE EXPOSURE; DRUGS; ANALGESICS; COMPARATIVE EVALUATIONS; BLOOD PLASMA; URINE; BIOAVAILABILITY				
Mason, W.D. 1984 Journal of Pharmaceutical Sciences 73(7):000-000				

Salicylic acid acetate (8 CI); Benzoic acid, 2-(acetyloxy)- (9 CI)
50-78-2
C9-H8-O4
MW 180.2, MP 135 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10905 Blood, plasma	15 Ingestion	a) Not given b) Not given	a) 110.8 ug/ml b) 196.4 ug/ml	a) After 1 wk of 2600 mg/d b) After 1 wk of 2600 mg/d and 2nd wk of 3900 mg/d. 6 males, 9 females, 20-39 yr old healthy volunteers
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; RHEUMATOID ARTHRITIS; ANALGESICS; ANTIPYRETICS; BIOACCUMULATION; DRUGS Lanza, F.L.; Nelson, R.S.; Rack, M.F. 1964 Journal of Clinical Pharmacology 24:89-95				

Tissue	Cases Exposure Route	Range	Mean	General Information
10906 Blood, plasma	6 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 26.1+/-15.0 umol/l b) 41.1+/-25.6 umol/l c) 52.6+/-20.6 umol/l d) 78.0+/-58.5 umol/l	a) 0.94+/-0.57 hr after 650 mg Bi-prin b) 0.68+/-0.61 hr after 600 mg compressed aspirin c) 0.69+/-0.23 hr after 650 mg Bufferin d) 0.45+/-0.20 hr after 650 mg Asproclear Peaks Normal 20-42 yr olds Inhibition of platelet aggregation, all preparations HPLC
AUSTRALIA; ADULTS; BLOOD PLASMA; ANTICOAGULANTS; COMPARATIVE EVALUATIONS; DRUGS; DELIBERATE EXPOSURE Siebert, D.J.; Bochner, F.; Imhoff, D.M.; Watts, S.; Lloyd, J.V.; Field, J.; Gabb, B.W. 1968 Clinical Pharmacology and Therapeutics 33(3):367-374				

Tissue	Cases Exposure Route	Range	Mean	General Information
10907 Blood, plasma	15 Ingestion	13.6-8.6 ug/ml	Not applicable	Maximum concentration vs mEq buffer, 0-34 mEq, peak (17.6 ug/ml) at 6 mEq. Following 650 mg dose. Drug absorbed best at low buffering range. Healthy volunteers, 21-33 yr old HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; ANALGESICS; ANTIPYRETICS; DRUG THERAPY; BIOACCUMULATION; BIOAVAILABILITY; DRUGS Mason, W.D. 1964 Journal of Pharmaceutical Sciences 73(9):1258-1261				

Salicylic acid acetate (8 CI); Benzoic acid, 2-(acetyloxy)- (9 CI)
50-78-2
C9-H8-O4
MW 180.2, MP 135 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10908 Blood, plasma	5 Ingestion Injection	a) 0.2-0.55 ug/ml b) 1.0-0.08 ug/ml c) 1.17-0.4 ug/ml d) 2.1-0.13 ug/ml e) 60-20 ng/ml	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 10 and 75 min after 325 mg, oral. Peak 4.5 ug/ml at 25 min. Coadministered with b) b) 5 and 60 min after 40 mg deuterium-labeled aspirin IV c) 15 and 75 min after 325 mg, oral coadministered with d). Peak 4.0 ug/ml at 25 min. 325 mg oral every 6 hr for 7 d prior d) 5 and 60 min after 40 mg deuterium-labeled aspirin IV e) 10 and 90 min after 20 mg, oral. Peak 220 ng/ml at 30 min Estimated from graph. 26-35 yr old healthy, nonsmoking volunteers GC/MS
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; ANALGESICS; DRUGS Pedersen, A.K.; FitzGerald, G.A. 1984 New England Journal of Medicine 311(19):1206-1211				

Tissue	Cases Exposure Route	Range	Mean	General Information
10909 Blood, plasma	12 Ingestion	a) Not given b) Not given c) Not given	a) 5.67+/-2.60 mg/l b) 10.96+/-3.13 mg/l c) 10.0+/-2.16 mg/l	a) Peak 60.6+/-26.2 min after 650 mg unbuffered form b) Peak 19.6+/-6.0 min after 640 mg with 16 meq buffer c) Peak 22.8+/-5.4 min after 648 mg with 34 meq buffer Dosage given 1 hr after 458 calorie meal. Healthy volunteers, 21-27 yr old, wt 56.9-88.6 kg
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; ANALGESICS; ANTIPYRETICS; DRUGS; DRUG THERAPY; DIETS; BIOACCUMULATION Mason, W.D.; Winer, N. 1983 Journal of Pharmaceutical Sciences 72(7):819-821				

Tissue	Cases Exposure Route	Range	Mean	General Information
10915 Blood, plasma	5 Ingestion	a) 46.8+/-17.0-83.0+/-14.0 ng/ml b) 1192+/-142-200+/-60 ng/ml c) 1240+/-390-50+/-24 ng/ml d) 25500+/-5450-440+/-240 ng/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 1-4 hr after 20 mg b) Salicylate metabolite, 1-8 hr after 20 mg c) 1-4 hr after 325 mg d) Salicylate metabolite, 1-24 hr after 325 mg Inhibited aggregation of platelets and thromboxane generation. Healthy volunteers GC/MS
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; ANTICOAGULANTS; BIOACCUMULATION; METABOLITES; DRUGS FitzGerald, G.A.; Oates, J.A. 1984 Clinical Pharmacology and Therapeutics 35(5):633-640				

Salicylic acid acetate (8 CI); Benzoic acid, 2-(acetyloxy)- (9 CI)
50-78-2
C9-H8-O4
MW 180.2, MP 136 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10011 Liver	1 Ingestion	Not applicable	45 ug/g	Postmortem measurement. Victim drowned while in advanced stage of intoxication after having also taken 30 aspirin and 11 Halcion tablets. Level within therapeutic range. 70 yr old male suicide victim, NZ HPLC
DRUGS; DELIBERATE EXPOSURE; HYPNOTICS; SUICIDE; ALCOHOLS; NEW ZEALAND; BLOOD Wong, R.J. 1984 Journal of Analytical Toxicology 8:10-13				

Tissue	Cases Exposure Route	Range	Mean	General Information
10012 Urine	15 Ingestion	60.4-71.0	Not applicable	% dose at 24 hr after 650 mg. Excretion highest with no buffer or high levels of buffer, moderated by 8-16 mEq buffer range. Healthy volunteers, 21-33 yr old HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; ANALGESICS; ANTIPYRETICS; DRUG THERAPY; BIOACCUMULATION; BIOAVAILABILITY; DRUGS Mason, W.D. 1984 Journal of Pharmaceutical Sciences 73(9):1258-1261				

Salicylic acid acetate, ester with 4'-hydroxyacetanilide (8 CI); Benzoic acid, 2-(acetyloxy)-, 4-(acetylamino)phenyl ester (9 CI)
5003-48-5
C17-H15-N-O5
MW 313.32, MP 175-176 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10013 Blood, serum	6	1.88-0.75 mmol salicylate/l	Not applicable	Range of means. Index case (185 mmol salicylate/l) dosage 2g 4 times daily for 8 d. Showed symptoms of salicylate poisoning. Other subjects given dose of 1g 4X/d for 8 d. No toxicosis. 6 female hospital patients aged 77-90 yr Index case had osteo arthritis. Benorylate administered for relief Salicylate intoxication, agitation, visual hallucinations Trinder method
BLOOD SERUM; KIDNEYS; DELIBERATE EXPOSURE; UNITED KINGDOM; CASE HISTORIES; ADULTS; AGE; BONE DISEASES; ANALGESICS; DRUG THERAPY; COMPARATIVE EVALUATIONS; BIOACCUMULATION; METABOLITES; DRUGS Beringer, T.R.O. 1984 British Medical Journal 288:1844-1845				

Salicylic acid, ion(1-) (8 CI); Benzoic acid, 2-hydroxy-, ion(1-) (9 CI) (VAN)
69-36-5
C7-H5-O3
MW 138.12, MP 157-159 C, BP about 211 C at 20 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10916 Blood	1 Ingestion	Not given	<50 ug/ml	Autopsy. Dose unknown. Combined levels of ethanol, methanol and isopropanol <5 mg/dl. Data also for cloimipramine, somepirac, caffeine, acetaminophen, indomethacin, oxycodone, lorazepam. 57 yr old treated for depression, joint pain. Excessive drinking on occasion. Confusion, weakness, intoxication, death. Death due to clomipramine toxicity. TLC
AUTOPSIES; BEHAVIOR DISORDERS; NEUROLOGIC MANIFESTATIONS; BLOOD; URINE; ANTIDEPRESSIVE AGENTS; ANALGESICS; DRUGS; DRUG ABUSE; ALCOHOLS; METABOLITES; CASE HISTORIES; DELIBERATE EXPOSURE Meatherall, R.C.; Gusy, D.R.P.; Chalmers, J.L.; Keenan, J.R. 1983 Journal of Analytical Toxicology 7:168-171				

Tissue	Cases Exposure Route	Range	Mean	General Information
10915 Blood	a) 9 b) 16 c) 8 d) 9	a) 210-2400 mg/l b) 20-520 mg/l c) 71-710 mg/l d) 210-2400 mg/l	a) 588 mg/l b) 233 mg/l c) 240+/-212 mg/l d) 588 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths, 1979-1980 d) Single-drug deaths, without ethanol, 1975-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooke, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Tissue	Cases Exposure Route	Range	Mean	General Information
10916 Blood, serum	1 Ingestion	1050-650 mg/L	Not given	Postmortem measurement of subject found with empty oil of wintergreen bottle. Analytical method separates salicylate from methyl salicylate. 60 yr old black accidental poisoning victim Metabolic acidosis, death. LC
BLOOD SERUM; DELIBERATE EXPOSURE; CASE HISTORIES; ANALGESICS; DRUGS; ACCIDENTAL POISONING Levine, B.; Caplan, Y.H. 1984 Journal of Analytical Toxicology 8:239-241				

Salicylic acid, ion(1-) (8 CI); Benzoic acid, 2-hydroxy-, ion(1-) (9 CI) (VAN)
65-36-5
C7-H5-O3
MW 138.12, MP 157-159 C, BP about 211 C at 20 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
10917 Urine	1 Ingestion	Not given	<50 ug/ml	Autopsy. Dose unknown. Combined levels of ethanol, methanol and isopropanol <5 mg/dl. Data also for clomipramine, somepirac, caffeine, acetaminophen, indomethacin, oxycodone, lorazepam. 57 yr old treated for depression, joint pain. Excessive drinking on occasion. Confusion, weakness, intoxication, death. Death due to clomipramine toxicity. TLC
AUTOPSIES; BEHAVIOR DISORDERS; NEUROLOGIC MANIFESTATIONS; BLOOD; URINE; ANTIDEPRESSIVE AGENTS; ANALGESICS; DRUGS; DRUG ABUSE; ALCOHOLS; METABOLITES; CASE HISTORIES; DELIBERATE EXPOSURE Meatherall, R.C.; Gunz, D.R.P.; Chalmers, J.L.; Keenan, J.R. 1988 Journal of Analytical Toxicology 7:168-171				

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 439 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10918 Blood, plasma	18 Ingestion	a) 0.016-0.067 ug/g b) 0.067-0.141 ug/g c) 0.097-0.140 ug/g	a) 0.035+/-0.016 ug/g b) 0.101+/-0.028 ug/g c) 0.117+/-0.016 ug/g	a) Initial measurement b) Postsupplementation with 100 ug/d selenious acid c) Controls Se-deficiency documented by decreased plasma levels and erythrocyte glutathione peroxidase (GSHPx) activity. Supplementation did not normalize enzyme activity in the time limits of this study but did increase activity. 8 adults, long term "total parenteral nutrition" patients. 10 normal healthy adults as controls. Boston, MA Fluorometry
BLOOD PLASMA; BOSTON; GASTROINTESTINAL DISEASES; NUTRITIONAL DEFICIENCIES; NUTRITIONAL DISORDERS; SELENIUM; DELIBERATE EXPOSURE; DRUGS Baptista, R.J.; Bistrian, B.R.; Blackburn, G.L.; Miller, D.G.; Champagne, C.D.; Buchanan, L. 1984 American Journal of Clinical Nutrition 39:816-820				

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 429 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10010 Blood, serum		a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given	a) 0.09+/-0.03 ug/dL b) 0.08+/-0.03 ug/dL c) 0.07+/-0.02 ug/dL d) 0.07+/-0.02 ug/dL e) 0.05+/-0.04 ug/dL f) 0.05+/-0.03 ug/dL g) 0.08+/-0.03 ug/dL h) 0.05+/-0.02 ug/dL i) 0.05+/-0.02 ug/dL j) 0.04+/-0.02 ug/dL	a) Day 1, enteral, n=6 b) Day 7, enteral, n=7 c) Day 14, enteral, n=6 d) Day 21, enteral, n=4 e) Day 28, enteral, n=2 f) Day 1, parenteral, n=12, significantly different from g), $p<0.01$ g) Day 7, parenteral, n=15 h) Day 14, parenteral, n=11 i) Day 21, parenteral, n=4 j) Day 28, parenteral, n=4 Enterally fed preterm infants, no additional trace element supplements. Totally or partially parenterally fed preterm infants supplemented with Zn and Cu at 350 and 20 ug/kg/d, respectively.
COPPER; ZINC; SELENIUM; BLOOD SERUM; CANADA; PREMATURE INFANTS; DIETS; INGESTION; DELIBERATE EXPOSURE; TRACE ELEMENTS; DRUGS Friel, J.K.; Gibson, R.S.; Pellowski, A.; Watts, J. 1984 Journal of Pediatrics 104(5):763-768				

Tissue	Cases Exposure Route	Range	Mean	General Information
10020 Blood, serum	100	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 1.15+/-0.04 umol/l b) 1.25+/-0.03 umol/l c) 1.18+/-0.06 umol/l d) 1.41+/-0.05 umol/l e) 1.15+/-0.06 umol/l f) 1.06+/-0.06 umol/l g) 1.09+/-0.06 umol/l h) 1.33+/-0.07 umol/l S.E.	a) Baseline, 44 gynecological cancer patients b) Baseline, 56 controls c) 12 from a), placebos d) Same group after 96 ug/d e) 10 from a), placebos f) Same group after 300 mg/d Vit E g) 10 from a), placebos h) Same group after 96 ug Se + 300 mg Vit E/d All treatments for 7 d. Significantly different: a) and b), d) and h), a) and b), c) and d), g) and h). 63.6 yr old cancer patients, wt 66.7 kg. Normal 47.3 yr old controls, wt 64.3 kg AAS
NEOPLASMS; SELENIUM; COMPARATIVE EVALUATIONS; ANTITUMOR AGENTS; BLOOD SERUM; CARCINOMAS; DRUG THERAPY; DRUGS; DELIBERATE EXPOSURE; CHEMOTHERAPY Sundstrom, H.; Korpela, H.; Vilnikka, L.; Kauppila, A. 1984 Cancer Letters 24:1-10				

Selenium
7782-49-2
Se
AtW 78.96, MP 170-217 C, BP 685 C, VP 1 mm Hg at 356 C, 10 mm Hg at 420 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10921 Blood, serum	a) 12 b) 14 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 78.7+/-14 ug/l b) 90.8+/-14 ug/l c) 75.1+/-15.4 ug/ml d) 78.3+/-18.9 ug/l	a) 66 ug Se/day, beginning b) End, p<0.005 c) Controls, beginning d) End Se-yeast or yeast tablet daily in double blind study. Sampled at beginning and end of 2 wk trial after overnight fast. Healthy medical students, 21-33 yrs old, body mass index 19.2-24.5 AAS
BLOOD SERUM; DELIBERATE EXPOSURE; FINLAND; CARDIOVASCULAR DISEASES; SELENIUM; DRUGS Luoma, P.V.; Sotaniemi, E.A.; Korpela, H.; Kumpulainen, J. 1984 Research Communications in Chemical Pathology and Pharmacology 46(3):469-472				

Sodium bromide (8 CI); Sodium bromide [NaBr] (9 CI)
7647-15-6
Br-Na
MW 102.01, MP 755 C, BP 1390 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10922 Blood, serum	a) 8 b) 4 c) 4 Ingestion	a) 8.5-10.0 mg/L b) 8.5-9.1 mg/L c) 14.0-26.5 mg/L	a) 5.2 mg/L b) 6.8 mg/L c) 17.7 mg/L	a) Untreated adults b) Pre-dose c) Post-dose (5 hr) Dose, 4 mmol NaBr (320 mg Br). Described efficient, sensitive method for monitoring levels. May be adapted to other anionic species. Healthy adults HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; MEASUREMENT METHODS; BROMIDE Miller, M.E.; Cappon, C.J. 1984 Clinical Chemistry 30(5):781-783				

Sodium, ion (Na(1+))
17341-25-2
Na
AtW 22.98977

Tissue	Cases Exposure Route	Range	Mean	General Information
10928 Blood, cells	8 Injection Ingestion	a) 65.8-300.8 mmol.hr/l b) 145.6-265.2 mmol.hr/l	a) 142.9+/-27.6 mmol.hr/l b) 185.9+/-14.0 mmol.hr/l	a) Area under curve, 0-104 hr after 1 mg IV digoxin b) Area under curve, 0-104 hr after 120 mg verapamil t.i.d. for 7 d and 1 mg IV digoxin on d 7 Digoxin inhibits Na-K-activated ATPase, resulting in elevated intraerythrocytic Na. Verapamil elevates plasma digoxin, hence intraerythrocytic Na. Healthy volunteers, 21-32 yr old RIA
BLOOD CELLS; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; CARDIOVASCULAR DISEASES; DRUGS; DRUG THERAPY; DRUG INTERACTION; BIOACCUMULATION Pederson, K.E.; Christiansen, B.D.; Kjaer, K.; Klitgaard, N.A.; Nielsen-Kudsk, F. 1988 Clinical Pharmacology and Therapeutics 34(1):8-13				

Streptamine, O-3-amino-3-deoxy-alpha-D-glucopyranosyl-(1-4)-O-(2,6-diamino-2,3,6-trideoxy-alp ha-D-ribo-hexopyranosyl-(1-6))-2-deoxy-, D- (8 CI) D-Streptamine, O-3-amino-3-deoxy-alpha-D-glucopyranosyl-(1-6)-O-(2,6-diamino-2,3,6-trideoxy-alp ha-D-ribo-hexopyranosyl-(1-4))-2-deoxy- (9 CI)
[illegible]-86-4
C18-H37-N5-O9
MW 467.54

Tissue	Cases Exposure Route	Range	Mean	General Information
10924 Blood, plasma	a) 6 b) 6 Injection	a) 6-1.5 ug/ml b) 0.95-0.6 ug/ml	a) Not applicable b) Not applicable	a) 1-72 hrs, peak (6 ug/ml) at 1 hr after 1.5 mg/kg IV b) 1-48 hrs, peak (1.9 ug/ml) at 5 hr after 1.5 mg/kg in 2 l dialysate for 4 hr dwell. Patients on continuous ambulatory peritoneal dialysis Immunoassay; Well-diffusion

BLOOD PLASMA; DIALYSIS FLUID; DELIBERATE EXPOSURE; KIDNEY DISEASES; ANTIBIOTICS; DRUG THERAPY; DRUGS; BIOACCUMULATION; BIOLOGICAL MONITORING
Bunke, C.M.; Aronoff, G.R.; Brier, M.E.; Sloan, R.S.; Luft, F.C. 1983 Clinical Pharmacology and Therapeutics 34(1):110-116

Tissue	Cases Exposure Route	Range	Mean	General Information
10925 Blood, serum	10 Injection	a) 1.4+/-1.0-6.0+/-2.4 ug/ml b) 5.4+/-1.3-1.5+/-0.6 ug/ml	a) Not given b) Not given	a) 6 hr after 1.5 mg/kg loading dose IV and 0.5 hr later, after completing first maintenance dose b) 0.5 hr after third maintenance dose, plus 4 g piperacillin, and 5.17 hr later Ranges of means. 3 maintenance doses each given over 15 min as IV, at 6 hr intervals. Predose level for second maintenance dose 1.6+/-0.9 ug/ml Ratio of piperacillin to tobramycin level in b) 26.4+/-9.0-4.2+/-3.5. No statistically significant effects of piperacillin on tobramycin kinetics were found in patients with normal renal function. Clinically stable transrectal prostatic needle biopsy patients, mean age 60+/-18.0, University of Illinois Hospital, Chicago RIA

BLOOD SERUM; DELIBERATE EXPOSURE; INFECTION; ANTIBIOTICS; DRUG INTERACTION; DRUGS; METABOLISM
Lau, A.; Lee, M.; Plascha, S.; Prasad, R.; Shariff, R. 1983 Antimicrobial Agents and Chemotherapy 24(4):533-537

Tissue	Cases Exposure Route	Range	Mean	General Information
10926 Blood, serum	18 Injection	a) 3.5-8.3 ug/ml b) 1.1-3.2 ug/ml c) 4.5-9.9 ug/ml d) 1.2-3.6 ug/ml e) 5.0-10.2 ug/ml f) 0.7-2.0 ug/ml	a) 6.48+/-1.83 ug/ml b) 1.82+/-0.84 ug/ml c) 7.78+/-1.83 ug/ml d) 1.94+/-0.85 ug/ml e) 7.13+/-1.89 ug/ml f) 1.33+/-0.44 ug/ml	a) 1000-1499 g body wt, peak, 5 cases b) Trough c) 1500-1999 g body wt, peak, 7 cases d) Trough e) >-/2000 g body wt, peak, 6 cases f) Trough Treated for sepsis with 2.5 mg/kg every 12 hrs for at least 48 hr. Newborn, 2-7 d old. 6 females, 12 males EMIT

BLOOD SERUM; DELIBERATE EXPOSURE; NEWBORN; INFECTION; ANTIBIOTICS; DRUG THERAPY; DRUGS; BIOACCUMULATION
Nahata, M.C.; Powell, D.A.; Gregoire, R.P.; McClead, R.E.; Menke, J.A.; Bickers, R.G.; Glazer, J.P. 1983 Journal of Pediatrics 103(1):136-138

Streptamine, O-3-amino-3-deoxy-alpha-D-glucopyranosyl-(1-4)-O-(2,6-diamino-2,3,6-trideoxy-alp ha-D-ribo-hexopyranosyl-(1-6))-2-deoxy-, D- (8 CI) D-Streptamine, O-3-amino-3-deoxy-alpha-D-glucopyranosyl-(1-6)-O-(2,6-diamino-2,3,6-trideoxy-alp ha-D-ribo-hexopyranosyl-(1-4))-2-deoxy- (9 CI)
32986-56-4
C18-H37-N5-O9
MW 467.54

Tissue	Cases Exposure Route	Range	Mean	General Information
10027 Blood, serum	35	a) 16.0-9.1 ug/ml b) 10.5-5.4 ug/ml c) 10.6+/-2.7-6.6+/-3.2 ug/ml d) 9.8+/-2.9-4.4+/-1.6 ug/ml e) 9.1+/-1.5-3.2+/-1.8 ug/ml f) 7.6+/-1.0-1.8+/-0.7 ug/ml g) 9.3+/-4.0-2.9+/-1.4 ug/ml h) 7.5+/-2.6-1.4+/-0.3 ug/ml i) 7.7+/-1.3-1.6+/-0.6 ug/ml	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) Weight <1.0 kg, dose every 8 hr, 1 case b) Dose every 12 hr, 1 case c) Weight 1.01-1.49 kg, dose every 8 hr, 2 cases d) Dose every 12 hr, 5 cases e) Weight 1.5-1.99 kg, dose every 8 hr, 3 cases f) Dose every 12 hr, 5 cases g) Weight 2.0-2.99 kg, dose every 8 hr, 4 cases h) Dose every 12 hr, 4 cases i) Weight >3.0 kg, dose every 12 hr, 3 cases Dose as sulfate, 2.5 mg/kg. Half-life longer in smaller infants. 1-9 d olds, 27-40 wk gestation, 0.66-4.73 kg with sepsis RIA
BLOOD SERUM; DELIBERATE EXPOSURE; PREMATURE INFANTS; NEWBORN; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY Arbeter, A.M.; Saccar, C.L.; Bisner, S.; Sarni, E.; Yaffe, S.J. 1983 Journal of Pediatrics 103(1):131-135				

Tissue	Cases Exposure Route	Range	Mean	General Information
10028 Blood, serum	29 Injection	a) Not given b) Not given c) Not given	a) 5.4+/-2.1 ug/ml b) 3.6+/-0.8 ug/ml c) 6.7+/-1.7 ug/ml	a) 106.9+/-16.8 mg/8 hr, post-cesarean section endometritis patients, 29 cases b) 12 of a) 101.2+/-16.2 mg/8 hr, with subtherapeutic levels (<5-10 ug/ml) c) 17 of a) 114.3+/-10.1 mg/8 hr, with therapeutic levels 30 min after IV dose. Troughs </= 1 ug/ml. Significant difference b)&c), p<0.001. 23.3+/-5.1 yr old 73.0+/-13.1 kg patients, 4-10/82, Medical Center Hospital, San Antonio, TX Agar diffusion
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY Blanco, J.D.; Gibbe, R.S.; Duff, P.; Castaneda, Y.S. 1983 American Journal of Obstetrics and Gynecology 147(4):466-468				

Tissue	Cases Exposure Route	Range	Mean	General Information
10029 Dialysis fluid	a) 6 b) 6 Injection	a) 0.4+/-0.8-0.1+/-0.3 ug/ml b) 16.2+/-5.5-0.3+/-0.5 ug/ml	a) Not applicable b) Not applicable	a) [0-4]-[32-36] hr dwell, peak (1.0+/-0.5 ug/ml) at [12-24] hr b) [0-4]-[24-28] hr dwell, peak (16.2+/-5.5 ug/ml) at [0-4] hr Dose was 1.5 mg/kg in 2 l dialysate for 4 hr dwell. Patients on continuous ambulatory peritoneal dialysis Immunoassay; Well-diffusion
BLOOD PLASMA; DIALYSIS FLUID; DELIBERATE EXPOSURE; KIDNEY DISEASES; ANTIBIOTICS; DRUG THERAPY; DRUGS; BIOACCUMULATION; BIOLOGICAL MONITORING Bunke, C.M.; Aronoff, G.R.; Brier, M.E.; Sloan, R.S.; Luft, F.C. 1983 Clinical Pharmacology and Therapeutics 34(1):110-116				

Succinamic acid, 3-amino-N-(alpha-carboxyphenethyl)-, N-methyl ester, stereoisomer (8 CI) (VAN); L-Phenylalanine, N-L-alpha-aspartyl-, 1-methyl ester (9 CI)
22839-47-0
C14-H18-N2-O5
MW 294.30, MP 246-247 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10950 Blood, plasma	47 Rectal	0-42 ug/ml	Not given	Pre-dose levels, 1 g suppository/12 hr. Target level 6.25 ug/ml for surgery and during recovery. Australian surgical patients
BLOOD PLASMA; DELIBERATE EXPOSURE; AUSTRALIA; ANTIBIOTICS; REVIEW; DRUGS; SURGERY McLean, A.J.; Ioannides-Demos, L.L.; Spicer, W.J. 1984 Medical Journal of Australia 141:163-166				

Sulfamide, N'-((8alpha)-1,6-dimethylergolin-8-yl)-N,N-dimethyl-
64795-85-3
C18-H26-N4-O2-S

Tissue	Cases Exposure Route	Range	Mean	General Information
10981 Blood, plasma	6 Ingestion	a) Not given b) Not given c) Not given d) 700-0 pg/ml e) 1750-200 pg/ml f) 2200-250 pg/ml	a) 775+/-482 pg/ml b) 2076+/-621 pg/ml c) 2456+/-555 pg/ml d) Not given e) Not given f) Not given	a) Peak at 0.75+/-0.27 hr, 0.1 mg dose b) Peak at 1.33+/-0.52 hr, 0.35 mg dose c) Peak at 1.5+/-1.22 hr, 0.5 mg dose d) At 1.5 and 12 hr after 0.1 mg dose e) At 1.5 and 12 hr after 0.35 mg dose f) At 1.5 and 12 hr after 0.5 mg dose d-f estimated from graph, ranges of means. Effects of drug on anterior pituitary hormone and serum prolactin levels given. Healthy adult, 22-34 yr, 60-96 kg Orthostatic symptoms, headaches, nasal congestion, nausea (has been withdrawn from clinical trials due to long-term toxicity in animal studies) RIA
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; BIOAVAILABILITY Borges, J.L.C.; Schran, H.F.; Evans, W.S.; Rogol, A.D.; Kaiser, D.L.; MacLeod, R.M.; Boyett, R.L.; Elton, R.L.; Thorner, M.O. 1984 Clinical Pharmacology and Therapeutics 36(5):694-703				

Sulfanilamide, N(1)-(5-methyl-3-isoxazolyl)- (8 CI); Benzenesulfonamide, 4-amino-N-(5-methyl-3-isoxazolyl)- (9 CI)
723-46-6
C10-H11-N3-O3-S
MW 253.31, MP 167 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10982 Blood, serum	1 Ingestion	a) 20-64 ug/ml b) 130-62 ug/ml	a) Not given b) Not given	a) At 30 min and 2 hr after first dose. Level 36 ub/ml at 6 hr b) At 2 and 6 hr after fifteenth dose. Level 92 ug/ml at 30 min Levels typical of 14 adolescent and young adult patients given 800 mg, with 160 mg trimethoprim, every 8 hr for 5 d. At steady state, average peak increased 91 ug/ml. Mean steady state ratio of the two drugs 42/1. Dosage adjustments needed for cystic fibrosis patients, due to shorter half-life and higher body clearance than reported in the literature for normal adults. Some values estimated from figure. Cystic fibrosis patient Colorimetry
BLOOD SERUM; DELIBERATE EXPOSURE; ANTIBIOTICS; DRUGS; METABOLISM Reed, M.D.; Stern, R.C.; Bertino, J.S., Jr.; Myers, C.M.; Yamashita, T.S.; Blumer, J.L. 1984 Journal of Pediatrics 104(2):303-307				

Sulfanilamide, N(1)-2-pyrimidinyl- (8 CI); Benzenesulfonamide, 4-amino-N-2-pyrimidinyl- (9 CI)
68-35-9
C10-H10-N4-O2-S
MW 250.28, MP 252-256 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10983 Blood	2	a) Not given b) Not given	a) 19.8 mg/100 cc b) 44.0 mg/100 cc	a) 17 d of treatment, symptoms relieved by catheterization b) Elevated nonprotein nitrogen during treatment Toxic symptoms rare and mild. "Landmark Article" first published in 1941. Discusses treatment of 446 patients, no levels given. Patients with bacterial infections, Boston, MA Ureteral colic and gross hematuria followed by anuria
10984 Urine	1	Not given	271 mg/100 cc	Crystals, no other symptoms. First urine voided after catheterization. "Landmark Article" first published in 1941. Discusses treatment in 446 patients, no levels given. Toxic symptoms rare and mild. Patient with bacterial infection, Boston, MA Ureteral colic and gross hematuria followed by anuria
LUNGS; DELIBERATE EXPOSURE; CASE HISTORIES; RESPIRATORY DISEASES; SULFONAMIDES; DRUGS; DRUG THERAPY Finland, M.; Strauss, E.; Peterson, O.L.; 1984 Journal of the American Medical Association 251(11):1467-1474				

Technetium, isotope of mass 99
14133-76-7
Tc
AtW 98.9062, MP about 2250 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10985 Milk	1 Injection	5.755-0.001 uCi/ml	Not given	3.25 and 45 hr after 10 mCi IV for brain scan. Breastfeeding discontinued for 3 d. Estimated dose to baby ingesting 180 ml: 1036 uCi at 3.25 hr-0.2 uCi at 45 hr. 25 yr old female, 3 mo postpartum Radiometry
MILK; DELIBERATE EXPOSURE; ADULTS; DRUGS; TECHNETIUM; HEALTH HAZARDS; LACTATION; RADIOISOTOPES Malcolm, M.J.; Gilcher, R.O. 1983 Pediatrics 71(5):841-842				

Teichomycin
61036-62-2
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Tissue	Cases Exposure Route	Range	Mean	General Information
10936 Blood, plasma	6 Injection	a) Not given b) Not given c) Not given	a) 53.48+/-22.26 ug/ml b) 111.81+/-43.35 ug/ml c) 7.12+/-1.81 ug/ml	a) Peak immediately after 3 mg/kg IV b) Peak immediately after 6 mg/kg IV c) Peak 2.02+/-1.19 hr after 3 mg/kg IM Kinetic data on new antibiotic. Healthy volunteers, 22-23 yr old Well diffusion
10937 Urine	6 Injection	a) Not given b) Not given c) Not given	a) 44% b) 43% c) 36%	a) 6 mg/kg IV b) 3 mg/kg IV c) 3 mg/kg IM % recovered in 102 hr. Kinetic data on new antibiotic. Healthy volunteers, 22-23 yr old Well diffusion
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; BELGIUM; ADULTS; INFECTION; ANTIBIOTICS; DRUGS; BIOACCUMULATION Verbist, L.; Tjandramaga, B.; Hendrickx, B.; Van Hecken, A.; Van Melle, P.; Verbesselt, R.; Verhaegen, J.; De Schepper, P.J. 1984 Antimicrobial Agents and Chemotherapy 26(6):882-886				

Theobromine (8 CI); 1H-Purine-2,6-dione, 3,7-dihydro-3,7-dimethyl- (9 CI)
83-67-0
C7-H8-N4-O2
MW 180.17, MP 357 C, BP 290 C (sublimes)

Tissue	Cases Exposure Route	Range	Mean	General Information
10938 Blood	111	0-8.8 ug/ml	1.08+/-1.253 ug/ml	From umbilicial cord blood, sampled at delivery. New assay for caffeine and metabolites. Results suggest fetal exposure to caffeine and dimethylxanthenes higher than previously indicated. Newborn, Leeds Maternity Hospital, Leeds, UK HPLC
FETAL BLOOD; ENVIRONMENTAL EXPOSURE; FETUS; CAFFEINE; THEOPHYLLINES; BIOACCUMULATION; PREGNANCY; DRUGS Hartley, R.; Cockman, J.R.; Smith, I.J. 1984 Journal of Chromatography 306:191-203				

Theophylline (8 CI); 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl- (9 CI)
58-55-9
C7-H8-N4-O2
MW 180.17, MP 270-274 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10839 Blood	6 Ingestion	a) 7.4+/-2.7-10.5+/-3.6 ug/mL b) 8.8+/-2.9-15.2+/-4.2 ug/ml	a) Not given b) Not given	a) Pre-dose and peak levels, dosage 125 mg/8 hr-250 mg/12 hr, for 5 d b) Same regimen as a), plus 1 g/d cimetidine Ranges of means. Cimetidine lowers interdose clearance, raising steady-state levels. Chronic obstructive airways disease patients, mean age 62+/-5, using theophylline >6 mo. Concurrent cimetidine-theophylline therapy may induce toxicity. HPLC

URINE; DELIBERATE EXPOSURE; ADULTS; DRUGS

Cox, P.J.; Heijbroek, W.M.H.; Taylor, D.C.; Wood, P.J.; Cresswell, P.R.; Pepper, E.S.; Moore, P.J.; Mitchell, R.C.; Blake, T.J.A.; Dawborne, J.S.; Metcalf, R.; Johnson, P. 1984 Xenobiotica 14(7):509-514

Tissue	Cases Exposure Route	Range	Mean	General Information
10840 Blood	118	0-1.0 ug/ml	0.267+/-0.174 ug/ml	From umbilicial cord blood, sampled at delivery. New assay for caffeine and metabolites. Results suggest fetal exposure to caffeine and dimethylxanthenes higher than previously indicated. Newborn, Leeds Maternity Hospital, Leeds, UK HPLC

FETAL BLOOD; ENVIRONMENTAL EXPOSURE; FETUS; CAFFEINE; THEOPHYLLINES; BIOACCUMULATION; PREGNANCY; DRUGS

Hartley, R.; Cookman, J.R.; Smith, I.J. 1984 Journal of Chromatography 306:191-203

Tissue	Cases Exposure Route	Range	Mean	General Information
10841 Blood	6 Ingestion	a) 7.4+/-2.7-10.5+/-3.6 ug/mL b) 8.8+/-2.9-15.2+/-4.2 ug/mL	a) Not given b) Not given	a) Pre-dose and peak levels, dose 125 mg/8 hr-250 mg/12 hr for 5 d b) Same regimen plus 1 g/d cimetidine Ranges of means. Cimetidine lowers interdose clearance, raising steady-state levels Chronic obstructive airways disease patients, mean age 62+/-5 yr, using theophylline >6 mo Concurrent cimetidine-theophylline therapy may induce toxicity HPLC

BLOOD; DELIBERATE EXPOSURE; RESPIRATORY DISEASES; DRUG INTERACTION; DRUGS; THEOPHYLLINES; METABOLISM; DRUG THERAPY

Roberts, R.K.; Grice, J.; McGuffie, C. 1984 Medical Journal of Australia 140:279-280

Theophylline (8 CI); 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl- (9 CI)
58-55-9
C7-H8-N4-O2
MW 180.17, MP 270-274 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10942 Blood, plasma	16 Injection Ingestion	a) 0-1.5 ug/ml b) 0-1.5 ug/ml c) 0-1.5 ug/ml d) 0-1.5 ug/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 0-12 hr, peak (3.5 ug/ml) at 2 hr. Oral dose at 9:00 a.m. b) 0-12 hr, peak (2, 6 ug/ml) at 2 hr. Oral dose at 9:00 p.m. c) 0-12 hr, peak (4.0 ug/ml) at 15 min. IV dose at 9:00 a.m. d) 0-12 hr, peak (40. ug/ml) at 15 min. IV dose at 9:00 p.m. Doses 125 ug. Data from graphs Healthy volunteers, 21-27 yr old. Enzymatic
BLOOD PLASMA; DELIBERATE EXPOSURE; JAPAN; ADULTS; RESPIRATORY DISEASES; THEOPHYLLINES; BIOACCUMULATION; BIOLOGICAL MONITORING; METABOLISM; BIOAVAILABILITY; DRUGS Watanabe, H.; Nakano, S.; Nagai, K.; Ogawa, N. 1984 Journal of Clinical Pharmacology 24:509-14				

Tissue	Cases Exposure Route	Range	Mean	General Information
10943 Blood, plasma				Review. Metabolism, pharmacokinetics, adverse effects, and effects of age and disease states on absorption, distribution, and elimination.
BLOOD PLASMA; URINE; BLOOD; BRAIN; HEART; LIVER; LUNGS; KIDNEYS; SPLEEN; BLOOD SERUM; DELIBERATE EXPOSURE; NEWBORN; CHILDREN; ADULTS; AUTOPSIES; DRUGS; REVIEW; THEOPHYLLINES; METABOLISM; METABOLITES; CAFFEINE Haley, T.J. 1968 Drug Metabolism Reviews 14(2):295-335				

Tissue	Cases Exposure Route	Range	Mean	General Information
10944 Blood, plasma	13 Ingestion	a) 9.9+/-2.2-28.6+/-3.9 umol/L b) 10.5+/-1.7-30.8+/-3.9 umol/L c) 9.9+/-1.7-30.8+/-3.3 umol/L d) 14.9+/-5.0-34.7+/-7.2 umol/L S.E.	a) Not given b) Not given c) Not given d) Not given	a) 0-24 hr after 250 mg tablet after overnight fast b) 0-24 hr after 250 mg tablet after standardised breakfast c) 0-24 hr after 2 half-tablets (250 mg) after standardised breakfast d) 0-24 hr after 1 half-tablet (250 mg) following overnight fast Ranges of means. Tablets were nuelin SR. Cross-over experiment, order usually a), b), c) or a), b), d). Treatments on 3 consecutive days. Marked interindividual variations in levels on all study days, but no significant differences in amounts absorbed or bioavailability connected with the treatments. 31-75 yr old volunteers with increased bronchial reactivity and impaired pulmonary function, non-smokers, Australia HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; AUSTRALIA; RESPIRATORY DISEASES; PULMONARY DISEASES; MUSCLE RELAXANTS; THEOPHYLLINES; DRUGS Shenfield, G.M.; Hudson, B.J.; Boutagy, J.S.; Munro, I.A.; Vandenberg, R.A. 1984 Medical Journal of Australia 140:477-479				

Theophylline (8 CI); 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl- (9 CI)
58-55-9
C7-H8-N4-O2
MW 180.17, MP 270-274 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10946 Blood, plasma	12 Injection Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 181.5+/-14.4 ug x hr/ml b) 159.5+/-14.2 ug x hr/ml c) 146.7+/-17.1 ug x hr/ml d) 216.9+/-16.9 ug x hr/ml e) 87.9+/-16.1 ug x hr/ml f) 142.0+/-19.4 ug x hr/ml g) 113.9+/-16.4 ug x hr/ml h) 180.1+/-16.9 ug x hr/ml	a) After 400 mg IV, smokers b) After 400 mg IV, nonsmokers c) After 400 mg, uncoated tablets, smokers d) After 400 mg, uncoated tablets, nonsmokers e) After 400 mg, sustained-release tablets formulation I, smokers f) After 400 mg, sustained-release tablets formulation I, nonsmokers g) After 400 mg, sustained-release tablets formulation II, smokers h) After 400 mg, sustained-release tablets formulation II, nonsmokers Administered as aminophylline. Area under curve. Smoking enhanced elimination Healthy 27-44 yr olds, wt 59.9-70.0 kg HPLC

ADULTS; BLOOD PLASMA; DRUGS; COMPARATIVE EVALUATIONS
Horai, Y.; Ishizaki, T.; Sasaki, T.; Chiba, K.; Sugamma, T.; Echisen, H.; Ohnishi, A. 1983 European Journal of Clinical Pharmacology 24:79-87

Tissue	Cases Exposure Route	Range	Mean	General Information
10946 Blood, plasma	1 Ingestion Injection	a) 10-3 ug/ml b) 6-4 ug/ml	a) Not given b) Not given	a) End of, and 6 hr after, 5 min IV infusion of 215 mg (as 250 mg aminophylline) b) 30 min and 6 hrs after 255 mg (as 300 mg aminophylline tablets). Level 4 ug/ml at 15 min 1 of 3 cases. Estimated from figure. Healthy 23-26 yr old volunteers, wt 65-95 kg HPLC

BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; DRUG INTERACTION; DRUGS; THEOPHYLLINES; METABOLISM
Cotgreave, I.A.; Caldwell, J. 1983 Journal of Pharmacy and Pharmacology 35:376-382

Theophylline (8 CI); 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl- (9 CI)
58-55-9
C7-H8-N4-O2
MW 180.17, MP 270-274 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10047 Blood, plasma	9 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given	a) 22.38+/-3.70% b) 26.43+/-7.79% c) 70.38+/-3.86% d) 69.57+/-7.68% e) 0.61+/-0.45% f) 0.43+/-0.72% g) 8.28+/-1.26% h) 2.84+/-1.55% i) 2.68+/-1.80% j) 0.69+/-0.75%	a) Caffeine, 26-32 wk post conception (PC), 8 infants b) Caffeine, 38-42 wk PC, 7 infants c) Theophylline, 26-32 wk PC d) Theophylline, 38-42 wk PC e) 3-Methylxanthine, 26-32 wk PC f) 3-Methylxanthine, 38-42 wk PC g) 1,3-Dimethyluric acid, 26-32 wk PC h) 1,3-Dimethyluric acid, 38-42 wk PC i) 1-Methyluric acid, 26-32 wk PC j) 1-Methyluric acid, 38-42 wk PC % of total metabolites. Dose: 6.6 mg/kg loading, 2.6 mg/kg/8 hr maintenance, 7-86 days. Given as aminophylline Premature infants, gestational age at birth 26-32 wk. Cleveland, Ohio GC/MS

OHIO; PREMATURE INFANTS; RESPIRATORY DISEASES; BLOOD PLASMA; URINE; COMPARATIVE EVALUATIONS; METABOLITES; DRUGS; DELIBERATE EXPOSURE
Teerug, K-Y.; Takieddine, F.N.; King, K.C. 1983 Clinical Pharmacology and Therapeutics 33(4):522-526

Tissue	Cases Exposure Route	Range	Mean	General Information
10048 Blood, plasma	1 Ingestion Injection	7.5-25.4 ug/ml	Not given	Measured on days 1 and 5 during treatment with 720 mg aminophylline, IV. Also given enoxacin (600 mg, 2X/d) which increased half life of theophylline. Range of means. Patient with bronchial disease and Pseudomonas infections of lower respiratory tract EMIT; HPLC

BLOOD PLASMA; RESPIRATORY DISEASES; PULMONARY DISEASES; ANTIBIOTICS; DRUG INTERACTION; THEOPHYLLINES; DRUGS; DRUG THERAPY
Wijnands, W.J.A.; van Herwaarden, C.L.A.; Vree, T.B. 1984 Lancet:2(8394):108-109

Tissue	Cases Exposure Route	Range	Mean	General Information
10049 Blood, plasma	a) 6 b) 6	a) 4.3+/-2.6-8.3+/-4.1 ug/ml b) 2.8+/-1.6-7.8+/-2.1 ug/ml	a) Not applicable b) Not applicable	a) Short-acting tablet, 1-7 d, plateau after 4 d b) Sustained-release tablet, 1-7 d, plateau after 4 d Range of means. Patients with bronchitis Headache, nausea

BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; NETHERLANDS; CARDIOVASCULAR DISEASES; RESPIRATORY DISEASES; VASODILATORS; DRUGS; DRUG THERAPY; BIOACCUMULATION; BLOOD PRESSURE; THEOPHYLLINES
Utama, I.; Kreukniet, J.; Fokkens, J.; Serra, R. 1983 International Journal of Clinical Pharmacology Therapy and Toxicology 21(6):292-296

Theophylline (8 CI); 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl- (9 CI)
58-55-9
C7-H8-N4-O2
MW 180.17, MP 270-274 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10950 Blood, plasma	8 Ingestion	a) 4.2-13.6 ug/ml b) 6.6-19.6 ug/ml c) Not given d) Not given	a) 8.1+/-0.95 ug/ml b) 11.2+/-4.16 ug/ml c) 6.4+/-0.8 ug/ml d) 8.6+/-1.0 ug/ml S.E.	a) Range of means, dose 384-1020 mg/d for chronic pulmonary disease, 8 cases b) Range of means, same theophylline + 300 mg/6 hr or 400 mg/8 hr cimetidine for 7 d, same 8 cases c) Trough, theophylline alone, same 8 d) Trough, theophylline + cimetidine, same 8 Significant difference: a) & b) $p<0.01$, c) & d) $p<0.05$. With cimetidine, half-life increased and plasma clearance decreased. 56-78 yr old male patients, wt 57.2-99.7 kg HPLC; MS
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; PULMONARY DISEASES; DRUGS; DRUG THERAPY; DRUG INTERACTION; THEOPHYLLINES Vestal, R.E.; Thummel, K.E.; Musser, B. 1983 British Journal of Clinical Pharmacology 15:411-418				

Tissue	Cases Exposure Route	Range	Mean	General Information
10951 Blood, plasma	12 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 12.6+/-2.0 ug/ml b) 16.0+/-1.3 ug/ml c) 11.9+/-1.8 ug/ml d) 15.6+/-1.0 ug/ml e) 120.1+/-19.5 ug.h/ml f) 160.2+/-14.1 ug.h/ml g) 106.1+/-16.4 ug.h/ml h) 151.7+/-11.1 ug.h/ml	a) Peak, 6 smokers, plain tablet b) Peak, 6 nonsmokers, plain tablet c) Peak, 6 smokers, sustained-release tablet d) Peak, 6 nonsmokers, sustained-release tablet e) Same as a) f) Same as b) g) Same as c) h) Same as d) a-d) peaks. e-h) area under curve. Plain tablet dose was 160 mg q.i.d. for 10 d. Sustained-release tablet dose was 300 mg b.i.d. for 10 d. Healthy volunteers, 27-44 yr old, wt 59.5-70.0 kg Abdominal discomfort, headache, insomnia, palpitation, anxiety, muscle weakness, flushing, nausea HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; RESPIRATORY DISEASES; DRUGS; DRUG THERAPY; THEOPHYLLINES; BIOACCUMULATION; INHALATION; SMOKING; TOBACCOS Ishizaki, T.; Horai, Y.; Sasaki, T.; Chiba, K.; Ohnishi, A.; Suganuma, T.; Tsujimoto, G.; Echizen, H.; Okaniwa, T. 1983 European Journal of Clinical Pharmacology 24:361-369				

Theophylline (8 CI); 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl- (9 CI)
58-55-9
C7-H8-N4-O2
MW 180.17, MP 270-274 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10952 Blood, plasma	a) 6 b) 6 c) 6 d) 6 e) 6 f) 6 g) 6 h) 6 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 7.8+/-2.2 mg/l b) 16.5+/-4.2 mg/l c) 4.6+/-0.6 mg/l d) 12.0+/-2.8 mg/l e) 7.9+/-2.8 mg/l f) 11.6+/-5.8 mg/l g) 4.4+/-0.8 mg/l h) 9.0+/-2.7 mg/l	a) Day 1, control, at 53+/-26 min, short-acting form b) Day 4, control, at 28+/-16 min, short-acting form c) Day 1, control, at 220+/-80 min, sustained release form d) Day 4, control, at 160+/-45 min, sustained release form e) Day 1, patients, at 90+/-54 min, short-acting form f) Day 4, patients, at 80+/-52 min, short-acting form g) Day 1, patients, at 250+/-94 min, sustained release form h) Day 4, patients, at 160+/-49 min, sustained release form Peaks. Dose: Short-acting form, theolair 250 mg t.i.d., sustained release form, theolair retard, 350 mg b.i.d. 6 healthy volunteers (1 female, 5 males, 22-45 yr old), 6 patients with moderately severe asthmatic bronchitis (1 female, 5 males, 24-60 yr old). HPLC

BLOOD PLASMA; DELIBERATE EXPOSURE; NETHERLANDS; ADULTS; RESPIRATORY DISEASES; ANTIHISTAMINES; DRUGS; DRUG THERAPY; BIOACCUMULATION; SMOKING; THEOPHYLLINES

Utama, I.; Kreukniet, J.; Meering, P.G.; Maes, R.A.A. 1983 International Journal of Clinical Pharmacology, Therapy and Toxicology 21(6):287-291

Tissue	Cases Exposure Route	Range	Mean	General Information
10953 Blood, plasma	12 Ingestion	64-161 mg/L	Not given	Peak levels, 2-18 hrs after dose. 15-74 yr olds requiring emergency treatment for overdoses Nausea, vomiting, sinus supraventricular tachycardia, ventricular bigeminy and trigeminy, abdominal pain, GI hemorrhage, restlessness, agitation, tremor, convulsions Marked transient hypokalemia

BLOOD PLASMA; DELIBERATE EXPOSURE; ADOLESCENTS; ADULTS; DRUGS; HEMOPERFUSION; THEOPHYLLINES; ACCIDENTAL POISONING; DRUG ABUSE

Buckley, B.M.; Braithwaite, R.A.; Vale, J.A. 1983 Lancet 2(8350):618

Tissue	Cases Exposure Route	Range	Mean	General Information
10954 Blood, serum	1 Ingestion	a) Not applicable b) Not applicable c) Not applicable	a) 16.4 ug/ml b) 17.3 ug/ml c) 41.7 ug/ml	a) Daily dose of Theo Dur 700 mg (28mg/kg) given every 8 hr, no side effects b) Theo-24, Pulmo-Tablets, same dose but given 1X/d at 7 AM with breakfast at 8 AM c) Ate candy within 15 min of taking medicine, later had severe headache and projectile vomiting, high level thought due to pH change in duodenum from food. 11 yr old girl Headache and vomiting

BLOOD SERUM; DELIBERATE EXPOSURE; CHILDREN; DRUGS; CASE HISTORIES; THEOPHYLLINES

Hendeles, L.; Wubbena, P.; Weinberger, M. 1984 Lancet 2(8417/8):1471

Theophylline (8 CI)¦ 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl- (9 CI)
58-55-9
C7-H8-N4-O2
MW 180.17, MP 270-274 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10055 Blood, serum				Review. Metabolism, pharmacokinetics, adverse effects, and effects of age and disease states on absorption, distribution, and elimination.
BLOOD PLASMA¦ URINE¦ BLOOD¦ BRAIN¦ HEART¦ LIVER¦ LUNGS¦ KIDNEYS¦ SPLEEN¦ BLOOD SERUM¦ DELIBERATE EXPOSURE¦ NEWBORN¦ CHILDREN¦ ADULTS¦ AUTOPSIES¦ DRUGS¦ REVIEW¦ THEOPHYLLINES¦ METABOLISM¦ METABOLITES¦ CAFFEINE Haley, T.J. 1983 Drug Metabolism Reviews 14(2):295-335				

Tissue	Cases Exposure Route	Range	Mean	General Information
10056 Blood, serum	5 Ingestion	32-50 ug/ml	42 ug/ml	Range of peaks. Repeated oral doses of activated charcoal used to combat overdose. Successful treatment for mild poisoning. Patients treated for intentional or iatrogenic overdose Tremor, nausea, tachycardia, atrial flutter Immunoassay
BLOOD SERUM¦ DELIBERATE EXPOSURE¦ ADULTS¦ ANTIHISTAMINES¦ DRUG THERAPY¦ THEOPHYLLINES¦ BIOACCUMULATION¦ DRUGS Radomski, L.¦ Park, G.D.¦ Goldberg, M.J.¦ Spector, R.¦ Johnson, G.F.¦ Quee, C.K. 1984 Clinical Pharmacology and Therapeutics 35(3):402-408				

Tissue	Cases Exposure Route	Range	Mean	General Information
10057 Blood, serum	18 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 14.98+/-0.89 ug/mL b) 11.81+/-1.13 ug/mL c) 12.58+/-1.06 ug/mL d) 12.89+/-1.39 ug/mL S.E.	a) Week 1, dose of 100-300 mg every 12 hr b) Week 2 c) Week 3 d) Week 4. 5-15 yr olds with asthma Headache, irritability, nausea, nervousness, vomiting
BLOOD SERUM¦ DELIBERATE EXPOSURE¦ CHILDREN¦ DRUGS¦ THEOPHYLLINES Furuhwa, C.T.¦ Shapiro, G.G.¦ Bierman, C.W.¦ Kraemer, M.J.¦ Ward, D.J.¦ Pierson, W.E. 1984 Pediatrics 74(4):453				

Tissue	Cases Exposure Route	Range	Mean	General Information
10058 Blood, serum	88 Intravenous	5->40 mg/L	Not given	Theophylline concentrations, after emergency treatment. Previous oral theophylline intake, within 24 hr discussed. Dose administered as aminophylline. Adults, 22 with asthma, mean age 45.1, mean weight 65.6 kg, 11 with chronic obstructive airways disease, mean age 65.8, mean weight 65.2 kg. Enzyme multiplied immunoassay
BLOOD SERUM¦ DELIBERATE EXPOSURE¦ ADULTS¦ DRUGS¦ DRUG THERAPY¦ THEOPHYLLINES Munro, C.S.¦ Prowse, K. 1984 British Medical Journal 289:854-855				

Theophylline (8 CI); 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl- (9 CI)
58-55-9
C7-H8-N4-O2
MW 180.17, MP 270-274 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10959 Blood, serum	12	a) 0.2-9.8 mg/l b) 1.0-7.6 mg/l c) 1.0-4.4 mg/l	a) Not given b) Not given c) Not given	a) 0.5-18 hr after 4.66 mg/kg body wt, iv. Peak 0.5 hr b) Same subjects. 1-26 hr after each of 2 doses (6 d apart) of slow-release sprinkle preparation, mean dose 10.1 mg/kg body wt. With water, fasting. Peak 6.7 hr c) Same subjects, regimen as b) doses with standardized meal. Peak, 7.9 hr Ranges of means. Cross-over study, some treated in order a)-b)-c), some a)-c)-b). Absorption delayed and reduced in c) as compared to b). Individual variations in b) and c). Asthmatic children ages 9-12, mean wt 38 kg HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; DENMARK; CHILDREN; ADULTS; RESPIRATORY DISEASES; DRUGS; MUSCLE RELAXANTS; THEOPHYLLINES Pederson, S.; Molier-Petersen, J. 1984 Pediatrics 74(4):534-538				

Tissue	Cases Exposure Route	Range	Mean	General Information
10960 Blood, serum	14 Ingestion	a) 6.2-16.2 ug/ml b) 8.5-24.8 ug/ml c) 4.6-15.6 ug/ml	a) 11.2+/-2.9 ug/ml b) 15.5+/-4.6 ug/ml c) 10.4+/-2.9 ug/ml S.E.	a) Time 0, before 8 am dose b) 6 hr after dose c) 12 hr after dose 12 hr intervals, slow-release form, mean dose 6.8+/-1.6 mg/kg body wt. Therapeutic levels maintained satisfactorily. Clearance inversely related to age in 13 nonsmokers. Kinetics unaffected by other antiasthmatic drugs taken concurrently, but higher a) than c) suggest circadin variation. Asthama patients, 22-74 yr old ELISA
BLOOD SERUM; DELIBERATE EXPOSURE; PULMONARY DISEASES; THEOPHYLLINES; CIRCADIAN RHYTHMS; DRUGS; DRUG THERAPY Jackson, S.H.D.; Wright, J.M. 1983 European Journal of Clinical Pharmacology 24:205-208				

Tissue	Cases Exposure Route	Range	Mean	General Information
10961 Blood, serum	1 Ingestion	236-26.4 mg/l	Not given	12 and 40 hr after 100 capsules (250 mg ea) slow release preparation Hospital admission at 12 hr, and gastrointestinal lavage performed with activated charcoal for 2 hr. Four-hour hemoperfusion with charcoal started 4 hr after admission. Both procedures effective. Extubation after 20 hr. Half-life ranged from 3.25 hr during lavage to 13.5 hr after hemoperfusion. 20 yr old overdose victim Temporary coma, seizures Temporary ventricular ectopic beats HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; CASE HISTORIES; DRUG ABUSE; DRUGS; HEMOPERFUSION; LAVAGE; THEOPHYLLINES; SUICIDE Laggner, A.N.; Kaik, G.; Lenz, K.; Druml, W.; Kleinberger, G. 1984 British Medical Journal 288:1497				

Theophylline (8 CI); 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl- (9 CI)
58-55-9
C7-H8-N4-O2
MW 180.17, MP 270-274 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10962 Blood, serum	21 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 20.3+/-1.5 ug/ml b) 15.4+/-1.8 ug/ml c) 19.1+/-1.4 ug/ml d) 10.7+/-1.2 ug/ml e) 17.2+/-1.2 ug/ml f) 21.0+/-1.9 ug/ml	a) 1.5 ml aerosolized saline solution dose added, 12 patients, NR (nonresponders to inhaled isoproterenol) b) 1.5 ml aerosolized saline solution dose added, 9 patients, R (responders to inhaled isoproterenol) c) 1.5 ml of 10 mg/ml atropine sulfate (0.05 mg/kg) aerosolized dose added, 12 patiens, NR d) 1.5 ml of 10 mg/ml atropine sulfate (0.05 mg/kg) aerosolized dose added, 9 patients, R e) Standard clinical aerosol dose (15 mg) of metaproterenol added, 12 patients, NR f) Standard clinical aerosol dose (15 mg) of metaproterenol added, 9 patients, R Doses added to 7 mg/kg IV loading theophylline dose followed by continuous infusion to maintain levels of 15-20 ug/ml. Additional increase in forced expired volume after aerosol dosing is discussed and graphed. Outpatients with stable chronic obstructive pulmonary disease, no asthma Nausea, headache, tremor, dry mouth, urinary retention EMIT
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; DRUGS; DRUG INTERACTION; COMPARATIVE EVALUATIONS; THEOPHYLLINES Pacsamonte, P.M.; Martinez, A.J. 1964 Chest 65(5):610-615				

Tissue	Cases Exposure Route	Range	Mean	General Information
10963 Blood, serum	54 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given	a) 0.840+/-0.326 l/min/kg b) 0.750+/-0.168 l/min/kg c) 0.925+/-0.456 l/min/kg d) 0.772+/-0.316 l/min/kg e) 1.02+/-0.293 l/min/kg f) 0.780+/-0.267 l/min/kg g) 1.06+/-0.466 l/min/kg	a) All subjects b) Monozygotic twins c) Dizygotic twins d) 30 women e) 15 men f) 44 nonsmokers g) 10 smokers 8 hr total elimination rates after 4 mg/kg dose. Smokers and men had increased rates. Healthy volunteers, 18-50 yr old. 18 monozygotic twin pairs, 11 dizygotic twin pairs, 6 single individuals Enzyme immunoassay
URINE; BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; WASHINGTON; THEOPHYLLINES; BIOACCUMULATION; METABOLISM; METABOLITES Miller, M.; Opheim, K.E.; Raisys, V.; Motulsky, A.G. 1984 Clinical Pharmacology and Therapeutics 35(2):170-182				

Theophylline (8 CI); 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl- (9 CI)
58-55-9
C7-H8-N4-O2
MW 180.17, MP 270-274 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10064 Blood, serum	11 Injection	8.8-10.0 ug/ml	6.8+/-1.8 ug/ml	At time 0 after 4 mg/kg IV 30 min infusion. Clearance was about twice as fast during hemodialysis, with large intersubject variation. Nonasthmatic adults, 25-62 yr, 51.4-88.6 kg, on chronic hemodialysis for renal failure EMIT; HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; DRUGS; HEMODIALYSIS; THEOPHYLLINES Anderson, J.R.; Pehlis, A.; McQueen, R.C.; Purtell, J.N.; Slavin, R.G. 1983 Journal of Clinical Pharmacology 23:428-432				

Tissue	Cases Exposure Route	Range	Mean	General Information
10065 Blood, serum	5 Injection Ingestion S.E.	a) 9-0.7 mg/l b) 10-0.08 mg/l	a) Not applicable b) Not applicable	a) 0-24 hr, peak (10 mg/l) immediately after 6 mg/kg IV b) 0-24 hr, peak (9 mg/l) immediately after 6 mg/kg IV and 140 g oral activated charcoal over 12 hr. Healthy volunteers, 20-30 yr old EMIT
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; RESPIRATORY DISEASES; DRUGS; DRUG THERAPY; VASODILATORS; BIOACCUMULATION; THEOPHYLLINES Berlinger, W.G.; Spector, R.; Goldberg, M.J.; Johnson, G.F.; Quee, C.K.; Berg, M.J. 1983 Clinical Pharmacology and Therapeutics 33(5):351-354				

Tissue	Cases Exposure Route	Range	Mean	General Information
10066 Blood, serum	4 Injection Ingestion	a) Not given b) Not given	a) 85.7 mg b) 83.5 mg	a) After 30 min infusion of 250 mg as aminophylline, 3 cases b) After 300 mg b.i.d. oral, 1 case Total recovered during hemodialysis. Hemodialysis better than peritoneal dialysis in treating theophylline poisoning. Patient volunteers, 31-69 yr old, wt 50.4-98.8 kg, 3 females, 1 male HPLC
BLOOD SERUM; DIALYSIS FLUID; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; DRUGS; DRUG THERAPY; DRUG ABUSE; VASODILATORS; THEOPHYLLINES; BIOACCUMULATION Lee, C.-S.C.; Peterson, J.C.; Marbury, T.C. 1983 Journal of Clinical Pharmacology 23:274-280				

Theophylline (8 CI); 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl- (9 CI)
58-55-9
C7-H8-N4-O2
MW 180.17, MP 270-274 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10967 Blood, serum	88 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 14.88+/-2.02 ug/ml b) 12.99+/-1.86 ug/ml c) 11.81+/-4.62 ug/ml d) 7.20+/-1.55 ug/ml e) 13.86+/-1.73 ug/ml f) 13.47+/-3.02 ug/ml g) 13.40+/-2.04 ug/ml h) 12.80+/-1.76 ug/ml	a) Peak, <60 yr, 5 mg/kg solution b) Peak, >60 yr, 5 mg/kg solution c) Peak, <60 yr, 6 mg/kg slow release tablet d) Peak, >70 yr, 6 mg/kg slow release tablet e) Peak, males, 5 mg/kg solution f) Peak, females, 5 mg/kg solution g) Peak, non-smoker, 5 mg/kg solution h) Peak, smoker, 5 mg/kg solution. Healthy volunteers, 30 geriatric and 8 young, including 28 men (8 smokers) and 10 women (8 smokers) HPLC

BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; AGE; RESPIRATORY DISEASES; DRUG THERAPY; DRUGS; BIOACCUMULATION; THEOPHYLLINES; SMOKING; SEX
Pun, R.W.; Samaan, S.; Bukaty, S.C.; Lockey, R.F. 1988 Clinical Pharmacology and Therapeutics 34(1):60-67

Tissue	Cases Exposure Route	Range	Mean	General Information
10968 Blood, serum	6 Injections	a) Not given b) Not given c) Not given	a) 128 mg.hr/l b) 79 mg.hr/l c) 62 mg.hr/l d) 60 mg.hr/l e) 73 mg.hr/l	a) Controls b) 5 g charcoal every 2 hr c) 20 g charcoal ever 2 hr d) 10 g charcoal every hr e) 40 g charcoal every 4 hr. Area under curve, 6 mg/kg IV as aminophylline. Repeated small doses of charcoal enhanced body clearance. Healthy volunteers, 20-30 yr old EMIT

BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; DRUG ABUSE; DRUG THERAPY; DRUGS; THEOPHYLLINES; ACCIDENTAL POISONING; BIOACCUMULATION
Park, G.D.; Radomski, L.; Goldberg, M.J.; Spector, R.; Johnson, G.F.; Quee, C.K. 1988 Clinical Pharmacology and Therapeutics 34(5):663-666

Tissue	Cases Exposure Route	Range	Mean	General Information
10969 Blood, whole				Review. Metabolism, pharmacokinetics, adverse effects, and effects of age and disease states on absorption, distribution, and elimination.
10970 Brain				Review. Metabolism, pharmacokinetics, adverse effects, and effects of age and disease states on absorption, distribution, and elimination.

BLOOD PLASMA; URINE; BLOOD; BRAIN; HEART; LIVER; LUNGS; KIDNEYS; SPLEEN; BLOOD SERUM; DELIBERATE EXPOSURE; NEWBORN; CHILDREN; ADULTS; AUTOPSIES; DRUGS; REVIEW; THEOPHYLLINES; METABOLISM; METABOLITES; CAFFEINE
Haley, T.J. 1988 Drug Metabolism Reviews 14(2):335-355

Theophylline (8 CI); 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl- (9 CI)
58-55-9
C7-H8-N4-O2
MW 180.17, MP 270-274 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10071 Dialysis fluid	3 Injection	6.0-9.3 mg	7.4 mg	During peritoneal dialysis. Dose was 250 mg IV as aminophylline. 1 patient had 8 hr dialysis with single exchange of dialysate and 2 patients had 4 hr dialysis with hourly exchanges. Peritoneal dialysis less effective than [illegible] dialysis in treating theophylline poisoning. Patient volunteers, 2 males, 1 female, 35-45 yr old, wt 75.0-88.5 kg HPLC
BLOOD SERUM; DIALYSIS FLUID; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; DRUGS; DRUG THERAPY; DRUG ABUSE; VASODILATORS; THEOPHYLLINES; BIOACCUMULATION Lee, C.-S.C.; Peterson, J.C.; Marbury, T.C. 1988 Journal of Clinical Pharmacology 23:274-280				

Tissue	Cases Exposure Route	Range	Mean	General Information
10072 Heart				Review. Metabolism, pharmacokinetics, adverse effects, and effects of age and disease states on absorption, distribution, and elimination.
10073 Kidney				Review. Metabolism, pharmacokinetics, adverse effects, and effects of age and disease states on absorption, distribution, and elimination.
10074 Liver				Review. Metabolism, pharmacokinetics, adverse effects, and effects of age and disease states on absorption, distribution, and elimination.
10075 Lung				Review. Metabolism, pharmacokinetics, adverse effects, and effects of age and disease states on absorption, distribution, and elimination.
10076 Spleen				Review. Metabolism, pharmacokinetics, adverse effects, and effects of age and disease states on absorption, distribution, and elimination.
BLOOD PLASMA; URINE; BLOOD; BRAIN; HEART; LIVER; LUNGS; KIDNEYS; SPLEEN; BLOOD SERUM; DELIBERATE EXPOSURE; NEWBORN; CHILDREN; ADULTS; AUTOPSIES; DRUGS; REVIEW; THEOPHYLLINES; METABOLISM; METABOLITES; CAFFEINE Haley, T.J. 1988 Drug Metabolism Reviews 14(2):295-324				

Theophylline (8 CI); 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl- (9 CI)
58-55-9
C7-H8-N4-O2
MW 180.17, MP 270-274 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10977 Urine	36 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 15.6+/-8.0% b) 11.4+/-5.1% c) 32.8+/-7.7% d) 14.7+/-4.9% e) 25.6+/-16.8% % dose	a) 1-Methyluric acid b) 8-Methylxanthine c) 1,3-Dimethyluric acid d) Theophylline e) "Unaccounted" fraction % of 4 mg/kg dose as metabolites, all subjects. Also compared males, females, smokers, and nonsmokers. No significant differences found. Healthy volunteers, 18-50 yr old. Subjects selected from monozygotic twin pairs, dizygotic twin pairs, single individuals HPLC
URINE; BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; WASHINGTON; THEOPHYLLINES; BIOACCUMULATION; METABOLISM; METABOLITES Miller, M.; Opheim, K.E.; Raleye, V.; Motulsky, A.G. 1984 Clinical Pharmacology and Therapeutics 35(2):170-183				

Tissue	Cases Exposure Route	Range	Mean	General Information
10978 Urine				Review. Metabolism, pharmacokinetics, adverse effects, and effects of age and disease states on absorption, distribution, and elimination.
BLOOD PLASMA; URINE; BLOOD; BRAIN; HEART; LIVER; LUNGS; KIDNEYS; SPLEEN; BLOOD SERUM; DELIBERATE EXPOSURE; NEWBORN; CHILDREN; ADULTS; AUTOPSIES; DRUGS; REVIEW; THEOPHYLLINES; METABOLISM; METABOLITES; CAFFEINE Haley, T.J. 1983 Drug Metabolism Reviews 14(2):295-335				

Tissue	Cases Exposure Route	Range	Mean	General Information
10979 Urine	9 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given k) Not given l) Not given	a) 10.50+/-3.17% b) 10.32+/-4.79% c) 60.70+/-10.71% d) 42.76+/-11.85% e) Not detected f) 2.00% g) 0.41+/-0.28% h) 0.88+/-0.79% i) 19.50+/-6.46% j) 38.80+/-14.81% k) 8.80+/-8.24% l) 11.76+/-8.91%	a) Caffeine, 28-32 wk postconception (PC), 10 infants b) Caffeine, 38-42 wk PC, 9 infants c) Theophylline, 28-32 wk PC d) Theophylline, 38-42 wk PC e) Theobromine, 28-32 wk PC f) Theobromine, 38-42 wk PC g) 8-Methylxanthine, 28-32 wk PC h) 8-Methylxanthine, 38-42 wk i) 1,3-Dimethyluric acid, 28-32 wk PC j) 1,3-Dimethyluric acid, 38-42 wk PC k) 1-Methyluric acid, 28-32 wk PC l) 1-Methyluric acid, 38-42 wk PC % of total metabolites. Dose: 6.6 mg/kg loading, 2.6 mg/kg/6 hr maintenance, 7-86 days. Given as aminophylline. Premature infants, gestational age at birth 26-32 wk. Cleveland, Ohio GC/MS
OHIO; PREMATURE INFANTS; RESPIRATORY DISEASES; BLOOD PLASMA; URINE; COMPARATIVE EVALUATIONS; METABOLITES; DRUGS; DELIBERATE EXPOSURE Teerug, K-Y.; Takieddine, F.N.; King, K.C. 1983 Clinical Pharmacology and Therapeutics 33(4):522-526				

Theophylline, 7-(2,3-dihydroxypropyl)- (8 CI); 1H-Purine-2,6-dione, 7-(2,3-dihydroxypropyl)-3,7-dihydro-1,3-dimethyl- (9 CI)
479-18-5
C10-H14-N4-O4
MW 254.25, MP 158 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10980 Blood, serum	12 Ingestion	a) 24-14 ug/ml b) 19-7 ug/ml	a) Not applicable b) Not applicable	a) 2-6 hr, peak (24 ug/ml) 2 hr after 1 g probenecid followed in 0.5 hr by 20 mg/kg oral b) 2-6 hr, peak (19 ug/ml) 2 hr after 20 mg/kg Probenecid pretreatment retards rapid clearance. Estimated from graph. Healthy volunteers, 6 males, 6 females Aftertaste, gastrointestinal cramps HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; RESPIRATORY DISEASES; VASODILATORS; DRUGS; DRUG THERAPY; DRUG INTERACTION; BIOACCUMULATION May, D.C.; Jarboe, C.H. 1983 Clinical Pharmacology and Therapeutics 33(6):822-826				

Thiosulfuric acid, disodium salt (8 CI); Thiosulfuric acid [H2S2O3], disodium salt (9 CI)
7772-98-7
H2-O3-S2.2Na
MW 158.15

Tissue	Cases Exposure Route	Range	Mean	General Information
10981 Blood, plasma	8 Injection	15-20 umol/l	Not applicable	5-720 min, peak (1450 umol/l) at 360 min after IV dose of 12 g/sq m infused over 6 hr. 7 female, 1 male, 54-73 yr old, all with peritoneal neoplasms. All undergoing chemotherapy HPLC
10982 Urine	8 Injection	a) 16.4-41.5% b) 44.3-65.3 ml/min/sq m	a) 28.5+/-9.4% b) 50.4+/-11.0 ml/min/sq m	a) % initial dose b) Renal clearance After 12 g/sq m IV infusion Thiosulfate appears to prevent nephrotoxic effects of cisplatin. 7 female, 1 male, 54-73 yr old, all with peritoneal neoplasms. All undergoing chemotherapy HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; NEOPLASMS; DRUG INTERACTION; DRUG THERAPY; ANTITUMOR AGENTS; CHEMOTHERAPY; BIOACCUMULATION; BIOAVAILABILITY; DRUGS Shea, M.; Kosiol, J.A.; Howell, S.B. 1984 Clinical Pharmacology and Therapeutics 35(3):419-425				

Thymidine
50-89-5
C10-H14-N2-O5
MW 242.23, MP 186 C

Tissue	Cases Exposure Route	Range	Mean	General Information
10662 Blood, plasma	6 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given k) Not given	a) 0.66 mM b) 1.16+/-0.45 mM c) 10.5+/-0.88 mM d) 1.32+/-0.60 mM e) 0.80+/-0.20 mM f) 0.45+/-0.60 mM g) 0.18+/-0.10 mM h) 0.60+/-0.45 mM i) 0.16 mM j) 0.88 mM k) 0.15 mM	a) d 1 b) d 2 c) d 4 d) d 8 e) d 9 f) d 10 g) d 11 h) d 12 i) d 15 j) d 16 k) d 17 a-d) 75 g/sq m/24 hr, given until increase in S-phase in bone marrow cells had stabilized. e)-k) 30 g/sq m/24 hr. 1-beta-D-arabinofuranosylcytosine 200 mg/sq m/d infusions started d 7. Two patients achieved remission, for 6 wk and 3 mo. Patients, 21-48 yr, with acute nonlymphocytic leukemia, relapsed after conventional or experimental therapy Vomiting, nausea, diarrhea, abdominal cramps, headache, edematous erythema in palms and soles Elevated serum liver enzymes Chromatographic
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; ANTITUMOR AGENTS; DRUGS; DRUG THERAPY; DRUG INTERACTION; BIOPSIES; CHEMOTHERAPY; METABOLISM; NEOPLASMS Blumenreich, M.S.; Chou, T.-C.; Andreeff, M.; Vale, K.; Clarkson, B.D.; Young, C.W. 1984 Cancer Research 44:825-830				

Thyroxine, L- (8 CI); L-Tyrosine, O-(4-hydroxy-3,5-diiodophenyl)-3,5-diiodo- (9 CI)
51-48-9
C15-H11-I4-N-O4
MW 776.88, MP 235-236 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10664 Blood, serum	a) 1 b) 1 Ingestion	a) 35.1-9.3 ug/dL b) 37.8-27.0 ug/dL	a) Not given b) Not given	a) 22 and 31.5 hr after 1200 mg levothyroxine b) 4 and 52 hr after 40 mg levothyroxine After therapy with gastric lavage and activated charcoal, plus propranolol, prednisone, propylthiouracil and cholestyramine failed to correct toxicity symptoms in a), 6 hr charcoal hemoperfusion (3 charcoal units, each primed with 210 mL banked blood) was started at 22 hr. Levels for, and ratios of, other thyroid hormones given. 2 and 3 yr old accidental poisoning victims Increased pulse rate RIA
BLOOD SERUM; DELIBERATE EXPOSURE; CHILDREN; DRUGS; HORMONES; HEMOPERFUSION; LAVAGE; ACCIDENTAL POISONING; METABOLITES Lehrner, L.M.; Weir, M.R. 1984 Pediatrics 73(3):313-317				

Thyroxine, L- (8 CI); L-Tyrosine, O-(4-hydroxy-3,5-diiodophenyl)-3,5-diiodo- (9 CI)
51-48-9
C15-H11-I4-N-O4
MW 776.88, MP 235-236 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10665 Blood, serum	15 Ingestion	a) 28.5-51.6 pmol/l b) 130-260 nmol/l	a) 31.2+/-6.2 pmol/l b) 198.7+/-43.2 nmol/l	a) Free hormone b) Total circulating hormone 100-200 ug/d dose for more than 6 mo. Mean systolic time intervals were reduced at this dose but returned to normal when dose reduced by 50 ug. Hypothyroid patients, 26-65 yr old. RIA
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; UNITED KINGDOM; HORMONES; BIOACCUMULATION; BIOLOGICAL MONITORING; DRUGS Jennings, P.E.; O'Malley, B.P.; Griffin, K.E.; Northover, B.; Rosenthal, P.D. 1966 British Medical Journal 280:1645-1647				

Triethylamine, 2,2',2'''-(v-phenenyltrioxy)tris- (8 CI); Ethanamine, 2,2',2''-(1,2,3-benzenetriyltris(oxy))tris(N,N-diethyl- (9 CI)
155-76-4
C24-H45-N3-O3

Tissue	Cases Exposure Route	Range	Mean	General Information
10666 Blood, plasma	1 Injection	12-2 ug/ml	Not given	30 and 260 min after start of 35 min infusion of 80 ug/kg/min IV Patient typical of 10 in whom level and paralysis effect during anesthesia were compared. Premedication with analgesic and atropine or scopolamine. Anesthesia with droperidol, phenoperidine and thiopental. Estimated from figure. Patient undergoing elective surgery Fluorometry
BLOOD PLASMA; DELIBERATE EXPOSURE; DRUGS; METABOLISM Ramsay, I.M.; Shanks, C.A.; Triggs, E.J. 1968 Journal of Clinical Pharmacology 23:343-351				

Tissue	Cases Exposure Route	Range	Mean	General Information
10667 Blood, plasma	a) 1 b) 1 c) 1 d) 1 e) 1 f) 1 Injection	a) 50-1 ug/ml b) 50-2 ug/ml c) 50-2.5 ug/ml d) 40-1.5 ug/ml e) 40-1.0 ug/ml f) 40-3 ug/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) Cardiopulmonary bypass (CPB) patients, similar to controls, 0-12 hr, single bolus 480 mg b) Higher than controls, during and after CPB, 0-12 hr, single bolus 480 mg c) Higher than controls during terminal phase, 0-12 hr, single bolus 480 mg d) Similar to controls, 0-12 hr, 240 mg bolus plus 240 mg in priming fluid e) Elevated levels during CPB, 0-12 hr, 240 mg bolus plus 240 mg in priming fluid f) Higher during terminal phase, 0-12 hr, 240 mg bolus and 240 mg in priming fluids. 18-66 yr old patients, wt 53-91 kg Fluorimetry
BLOOD PLASMA; DELIBERATE EXPOSURE; AUSTRALIA; ADULTS; HEART DISEASES; CARDIOVASCULAR DISEASES; ANESTHETICS; DRUG THERAPY; DRUGS; SURGERY; BIOACCUMULATION; BIOLOGICAL MONITORING; HEMOPERFUSION Shanks, C.A.; Ramsay, I.M.; Walker, J.S.; Brown, K.F. 1968 Clinical Pharmacology and Therapeutics 33(6):782-790				

Tubocurarine (8 CI) (VAN); Tubocuraranium, 7',12'-dihydroxy-6,6'-dimethoxy-2,2',2'-trimethyl- (9 CI)
57-95-4
C37-H41-N2-O6
MW 609.80

Tissue	Cases Exposure Route	Range	Mean	General Information
10000 Blood, plasma	13 Injection	a) 5-2 ug/ml b) 5-4 ug/ml c) 4-0.5 ug/ml	a) Not applicable b) 3.00+/-0.50 ug/ml c) Not applicable	a) 0-1 hr, peak (5 ug/ml) at 5 min after 0.6 mg/kg bolus and 5 ug/ml/kg infusion prior to surgery b) 1-2.5 hr, plateau at 4 ug/ml (Normal plateau is 1.1 ug/ml) during cardiopulmonary bypass (CPB) surgery. Infusion rate 5 ug/min/kg c) 2.5-20 hr, cessation of infusion and surgery. Normal clearance occurs by 12th hour Onset of CPB surgery results in abrupt 400% increase. 12 males, 1 females, age 41-78 yr (mean 57) Dye complex reaction
BLOOD PLASMA; DELIBERATE EXPOSURE; AUSTRALIA; ADULTS; CARDIOVASCULAR DISEASES; PULMONARY DISEASES; ANALGESICS; DRUG THERAPY; DRUGS; BIOACCUMULATION; BIOLOGICAL MONITORING; BLOOD PRESSURE Walker, J.S.; Shanks, C.A.; Brown, K.F. 1984 Clinical Pharmacology and Therapeutics 35(5):686-694				

Uracil, 5-fluoro- (8 CI) (VAN); 2,4(1H,3H)-Pyrimidinedione, 5-fluoro- (9 CI)
51-21-8
C4-H3-F-N2
MW 130.08, MP 282-288 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10000 Ascites	2 Injection	Not given	17+/-11 pmol/g	Malignant tissue 500 mg/sq m IV given 180+/-0 min before biopsy. Measured as 5-fluorodeoxyuridylate. Patients with carcinoma undergoing surgery or local procedures Biochemical
BREAST; LIVER; INTESTINES; ASCITES; GASTROINTESTINAL SYSTEM; TUMORS; DELIBERATE EXPOSURE; ADULTS; ANTITUMOR AGENTS; DRUGS- BIOPSIES; CHEMOTHERAPY; FLUORINE COMPOUNDS; METABOLISM; BIOCONCENTRATION; NEOPLASMS; DRUG THERAPY Spears, C.P.; Gustavsson, B.G.; Mitchell, M.S.; Spicer, D.; Berne, M.; Bernstein, L.; Danenberg, P.V. 1984 Cancer Research 44:4144-4150				

Tissue	Cases Exposure Route	Range	Mean	General Information
10000 Blood, plasma	11 Injection	a) 4.6-35.0 ng/ml b) 0.9-16.0 ng/ml c) 0.3-6.0 ng/ml	a) 22.1 ng/ml b) 6.0 ng/ml c) 3.6 ng/ml	a) Level 15 min after 600-1000 mg IV b) Level 45 min after 600-1000 mg IV c) Level 75 min after 600-1000 mg IV. 38-79 yr old males, females being treated for cancer HPLC
BLOOD PLASMA; SALIVA; DELIBERATE EXPOSURE; ADULTS; CARCINOMAS; GASTROINTESTINAL DISEASES; ANTITUMOR AGENTS; DRUG THERAPY; DRUGS; BIOACCUMULATION; NEOPLASMS Cello, L.A.; DiGregorio, G.J.; Ruch, E.; Pace, J.; Pirsino, A.J. 1983 European Journal of Clinical Pharmacology 24:361-366				

Uracil, 5-fluoro- (8 CI) (VAN); 2,4(1H,3H)-Pyrimidinedione, 5-fluoro- (9 CI)
51-21-8
C4-H3-F-N2
MW 130.08, MP 282-288 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
10091 Breast	2 Injection	80-95 pmol/g	62+/-30 pmol/g	Adenocarcinoma tissue 500 mg/sq m IV given 185+/-30 min before biopsy. Measured as 5-fluorodeoxyuridylate. Patients with carcinoma undergoing surgery or local procedures Biochemical
10092 Intestine		Not given	347+/-484 pmol/g	Colonic adenocarcinoma tissue 500 mg/sq m IV given 87+/-64 min before biopsy. Measured as 5-fluorodeoxyuridylate.
10093 Liver	9	Not given	38+/-47 pmol/g	Normal tissue 500 mg/sq m IV 50+/-38 min before biopsy. Hepatic metastasis levels 340+/-455 pmol/g. Patients undergoing surgery for hepatic tumors metastatic from gastrointestinal sites.

BREAST; LIVER; INTESTINES; ASCITES; GASTROINTESTINAL SYSTEM; TUMORS; DELIBERATE EXPOSURE; ADULTS; ANTITUMOR AGENTS; DRUGS; BIOPSIES; CHEMOTHERAPY; FLUORINE COMPOUNDS; METABOLISM; BIOCONCENTRATION; NEOPLASMS; DRUG THERAPY

Spears, C.P.; Gustavsson, B.G.; Mitchell, M.S.; Spicer, D.; Berne, M.; Bernstein, L.; Danenberg, P.V. 1984 Cancer Research 44:4144-4150

Tissue	Cases Exposure Route	Range	Mean	General Information
10094 Saliva	11 Injection	a) 4.1-12.0 ng/ml b) 0.2-5.2 ng/ml c) 0.02-1.4 ng/ml	a) 7.8 ng/ml b) 1.6 ng/ml c) .5 ng/ml	a) Level 15 min after 600-1000 mg IV b) Level 45 min after 600-1000 mg IV c) Level 75 min after 600-1000 mg IV. 38-70 yr old males, females being treated for cancer HPLC

BLOOD PLASMA; SALIVA; DELIBERATE EXPOSURE; ADULTS; CARCINOMAS; GASTROINTESTINAL DISEASES; ANTITUMOR AGENTS; DRUG THERAPY; DRUGS; BIOACCUMULATION; NEOPLASMS

Cello, L.A.; DiGregorio, G.J.; Ruch, E.; Pace, J.; Pirsino, A.J. 1983 European Journal of Clinical Pharmacology 24:261-266

Tissue	Cases Exposure Route	Range	Mean	General Information
10095 Tumor	27 Injection	a) Not given b) Not given	a) 77+/-115 pmol/g b) 288+/-550 pmol/g	a) Gastrointestinal tumors b) Solid tumors 500 mg/sq m IV given 120+/-97 min before biopsy. Measured as 5-fluorodeoxyuridylate. Patients with carcinoma undergoing surgery or local procedures Biochemical

BREAST; LIVER; INTESTINES; ASCITES; GASTROINTESTINAL SYSTEM; TUMORS; DELIBERATE EXPOSURE; ADULTS; ANTITUMOR AGENTS; DRUGS; BIOPSIES; CHEMOTHERAPY; FLUORINE COMPOUNDS; METABOLISM; BIOCONCENTRATION; NEOPLASMS; DRUG THERAPY

Spears, C.P.; Gustavsson, B.G.; Mitchell, M.S.; Spicer, D.; Berne, M.; Bernstein, L.; Danenberg, P.V. 1984 Cancer Research 44:4144-4150

Uracil, 6-propyl-2-thio- (8 CI); 4(1H)-Pyrimidinone, 2,3-dihydro-6-propyl-2-thioxo- (9 CI)
51-52-5
C7-H10-N2-O-S
MW 170.26

Tissue	Cases Exposure Route	Range	Mean	General Information
10006 Blood, plasma	12 Ingestion	a) 3.94-0.17 ug/ml b) 0.10-2.62 ug/ml c) 2.57-0.24 ug/ml d) 3.44-0.19 ug/ml e) 3.04-0.21 ug/ml f) 3.22-0.20 ug/ml	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) Reference solution, 0.67 and 8 hr after dose, 3.04 ug/ml at 0.33 hr b) Eli Lilly formulation, 0.33 and 2 hr after dose, 0.31 ug/ml at 8 hr c) Lederle formulation, 0.67 and 8 hr, 0.62 ug/ml at 0.33 hr d) Parke-Davis, 1 and 8 hr, 1.78 ug/ml at 0.33 hr e) Mylan, 1.5 and 8 hr, 1.35 ug/ml at 0.33 hr f) Richlyn, 1 and 8 hr, 1.13 ug/ml at 0.33 hr Ranges of means. Crossover study, one 150 mg dose of each formulation. Significant differences at all times except at 2 hr. Healthy 20-25 yr olds, ht 172-198 km, wt 72-93 kg HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; DRUGS; COMPARATIVE EVALUATIONS Ringhand, H.P.; Ritschel, W.A.; Meyer, M.C.; Straughn, A.B.; Cabana, B.E. 1983 Journal of Pharmaceutical Sciences 72(12):1409-1412				

Urea, N'-(3-acetyl-4-(3-((1,1-dimethylethyl)amino)-2-hydroxypropoxy)phenyl)-N,N-diethyl-
56980-93-9
C20-H33-N3-O4

Tissue	Cases Exposure Route	Range	Mean	General Information
10007 Blood, plasma	8 Ingestion Injection	a) 450.3+/-71.5-1.18+/-0.39 ng/ml b) 161.8+/-167.2-9.9+/-4.0 ng/ml	a) Not given b) Not given	a) 5 min-48 hr, 48.59+/-2.7 ng/ml at 1 hr, 9.85+/-0.51 mg IV, 4 cases b) At 2 and 24 hr, 24.3+/-34.6 ng/ml at 20 min, 100 mg oral, 4 cases Range of means, dose labeled with carbon-14. Fecal levels also given. Healthy volunteers, 18-24 yr, 63-77 kg, 174-187 cm ht TLC; Scintillation counting
10008 Urine	8 Ingestion Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 27.37+/-1.77% b) 45.75+/-3.40% c) 50.65+/-3.93% d) 1.22+/-1.49% e) 8.45+/-6.89% f) 11.13+/-7.94% % of dose	a) 0-2 h, 9.85+/-0.51 mg IV, 4 cases b) 0-12 h, 9.85+/-0.51 mg IV c) 0-72, 9.85+/-0.51 mg IV d) 0-2 h, 100 mg oral, 4 cases e) 0-12 h, 100 mg oral f) 0-72 h, 100 mg oral Dose labeled with carbon-14. Fecal levels also given. Healthy volunteers, 18-24 yr, 63-77 kg, 174-187 cm ht TLC; Scintillation counting
BLOOD PLASMA; DELIBERATE EXPOSURE; GERMANY; ADULTS; ADOLESCENTS; BETA BLOCKER; DRUGS; URINE; FECES Hitzenberger, V.G.; Takacs, F.; Pittner, H. 1983 Arzneimittel-Forschung/Drug Research 33(1A):50-52				

Urea, 1-((p-chlorophenyl)sulfonyl)-3-propyl- (8 CI); Benzenesulfonamide, 4-chloro-N-((propylamino)carbonyl)- (9 CI)
94-20-2
C10-H13-Cl-N2-O3-S
MW 276.75, MP 127-129 C (also reported 125-127 C)

Tissue	Cases Exposure Route	Range	Mean	General Information
10000 Blood, serum	6 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given	a) 2581+/-207 mg.hr/l b) 700+/-40 mg.hr/l c) 3635+/-495 mg.hr/l d) 498+/-98 mg.hr/l e) 2891+/-226 mg.hr/l f) 35.4+/-1.8 mg/l g) 5.5+/-0.8 mg/l	a) Area under curve (AUC), controls b) AUC, with sodium bicarbonate c) AUC, with ammonium chloride d) AUC, with activated charcoal e) AUC, with activated charcoal from 6 hr on f) Controls, peak 4.7+/-1.0 hr after dose g) With activated charcoal, peak 12.7+/-3.8 hr after dose 250 mg. Acidic urine pH 4.7-5.5, alkaline pH 7.1-8.2. Renal drug clearance pH sensitive, absorption charcoal sensitive. Healthy volunteers, 4 males, 2 females, 20-40 yr old, wt 50-84 kg HPLC
11000 Urine	6 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 50.9+/-7.3 mg b) 213+/-11 mg c) 3.5+/-0.5 mg d) 8.9+/-1.8 mg e) 30.0+/-5.3 mg	a) Controls b) With sodium bicarbonate c) With ammonium chloride d) With activated charcoal e) With activated charcoal from 6 hr on Recovery in 72 hr after 250 mg. Excretion pH sensitive. Healthy volunteers, 4 males, 2 females, 20-40 yr old, wt 50-84 kg HPLC
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; DRUG THERAPY; DRUGS; AMMONIUM COMPOUNDS; BIOACCUMULATION Neuvonen, P.J.; Karkkainen, S. 1983 Clinical Pharmacology and Therapeutics 33(3):386-393				

Urea, 1-cyclohexyl-3-((p-(2-(5-methylpyrazinecarboxamido)ethyl)phenyl)sulfonyl)- (8 CI); Pyrazinecarboxamide, N-(2-(4-((((cyclohexylamino)carbonyl)amino)sulfonyl)phenyl)ethyl)-5-methyl- (9 CI)
29094-61-9
C21-H27-N5-O4-S
MW 445.55, MP 208-209 C, also reported as 200-203 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11001 Blood, cells	6 Injection	6-3 ng/ml	Not applicable	0.25-6 hr, peak (6 ng/ml) 0.25 hr after 1 mg/4.7 uCi IV, total C-14 compounds. Healthy volunteers, 34-62 yr old, wt 54-100 kg, ht 1.53-1.80 m, 2 males, 4 females Scintillation counting
11002 Blood, plasma	6 Injection Ingestion	a) 350-8 ng/ml b) 400-20 ng/ml c) 200-40 ng/ml d) 30-50 ng/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 5 min-12 hr, peak (350 ng/ml) immediately after 1 mg/4.7 uCi IV b) Total C-14 compounds, 5 min-12 hr, peak (400 ng/ml) immediately after 1 mg/4.7 uCi IV c) 0.5-12 hr, peak (360+/-48 ng/ml) 3.1+/-0.8 hr. After 5 mg/8.0 uCi oral d) Total C-14 compounds, 0.25-12 hr, peak (400 ng/ml) 3 hr after 5 mg/8.0 uCi oral. Healthy volunteers, 34-62 yr old, wt 54-100 kg, ht 1.53-1.80 m, 2 males, 4 females Scintillation counting

(next page)

Urea, 1-cyclohexyl-3-((p-(2-(5-methylpyrazinecarboxamido)ethyl)phenyl)sulfonyl)- (8 CI); Pyrazinecarboxamide, N-(2-(4-((((cyclohexylamino)carbonyl)amino)sulfonyl)phenyl)ethyl)-5-methyl- (9 CI)
20094-61-9
C21-H27-N5-O4-S
MW 445.55, MP 208-209 C, also reported as 200-203 C

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
11008 Saliva	6 Injection Ingestion	a) 0.8-0.4 ng/ml b) 6-2 ng/ml	a) Not applicable b) Not applicable	a) 0.5-4 hr, peak (0.8 ng/ml) 0.5 hr after 1 mg/4.7 uCi IV b) 1-6 hr, peak (6 ng/ml) 1 hr after 5 mg/8.0 uCi oral Total C-14 compounds. Healthy volunteers, 34-62 yr old, wt 54-100 kg, ht 1.53-1.80 m, 2 males, 4 females Scintillation counting
11004 Urine	6 Injection Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 4.5+/-0.9% b) 86.2+/-1.1% c) 6.2+/-2.1% d) 88.6+/-1.9%	a) Parent compound, 1 mg/4.7 uCi IV b) Total C-14 compounds, 1 mg/4.7 uCi IV c) Parent compound, 5 mg 18.0 uCi oral d) Total C-14 compounds, 5 mg/8.0 uCi oral % dose recovered in 48 hrs. Healthy volunteers, 34-62 yr old, wt 54-100 kg, ht 1.53-1.80 m, 2 males, 4 females Scintillation counting
BLOOD; URINE; SALIVA; BLOOD PLASMA; FECES; DELIBERATE EXPOSURE; FINLAND; ADULTS; DIABETES; DRUG THERAPY; DRUGS; BIOACCUMULATION Pentikainen, P.J.; Neuvonen, P.J.; Penttila, A. 1983 International Journal of Clinical Pharmacology, Therapy, and Toxicology 21(2):98-107				

Urea, 3-(9,10-didehydro-6-methylergolin-8alpha-yl)-1,1-diethyl- (8 CI); Urea, N'-((8alpha)-9,10-didehydro-6-methylergolin-8-yl)-N,N-diethyl- (9 CI)
18016-80-3
C20-H26-N4-O
MW 338.46, MP 186 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11005 Blood, plasma	11 Ingestion	a) 0.75-0.9 ng/ml b) 1.0-1.4 ng/ml	a) Not applicable b) Not applicable	a) 10-120 min, peak (1.4 ng/ml) at 20 min after 300 ug oral b) 10-120 min, peak (1.6 ng/ml) at 30 min after 300 ug/2 hr for 7 hr oral. Patients with idiopathic parkinsonism of 9 yr mean duration, 46-73 yr olds RIA
11005 Urine	5 Ingestion	0.01-0.08%	0.05+/-0.02%	% of 300 ug dose recovered unchanged in 0-24 hr. Patients with idiopathic parkinsonism of 9 yr mean duration, 46-73 yr olds RIA
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; NEUROMUSCULAR DISEASES; HYPOTENSION; DRUG THERAPY; BIOACCUMULATION; URINE; DRUGS Burns, R.S.; Gopinathan, G.; Humpel, M.; Dorow, R.; Caine, D.B. 1984 Clinical Pharmacology and Therapeutics 35(4):548-556				

Valeric acid, 2-propyl- (8 CI); Pentanoic acid, 2-propyl- (9 CI)
99-66-1
C8-H16-O2
MW 144.21, BP 120-121 C at 14 mm Hg, 128-130 C at 20 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
11007 Blood, plasma	13 Injection	a) 75-10 ug/ml b) 70-2 ug/ml	a) Not applicable b) Not applicable	a) 0-32 hr, peak at 5 min, elderly subjects b) 0-32 hr, peak at 5 min, young subjects Median elimination half-life 7.2 hr in young, 14.9 in elderly. Clearance did not differ. 7 volunteers 20-35 yr old, 6 volunteers 75-87 yr old. Enzymatic

BLOOD PLASMA; DELIBERATE EXPOSURE; SCOTLAND; ADULTS; CENTRAL NERVOUS SYSTEM DISEASES; NEUROLOGIC MANIFESTATIONS; ANTICONVULSANTS; DRUGS
Bryson, S.M.; Verma, N.; Scott, P.J.W.; Rubin, P.C. 1984 British Journal of Clinical Pharmacology 16:104-105

Tissue	Cases Exposure Route	Range	Mean	General Information
11008 Blood, plasma	17 Ingestion	a) 39-154 mg/l b) 2.3-35.5 mg/l c) 1.3-33.6 mg/l	a) Not given b) Not given c) Not given	a) Total, free & bound b) Free, determined with equilibrium dialysis c) Free, by novel ultrafiltration method At time of contrast exam, after 30 mg/kg given at 20 hr on previous evening, and 15 mg/kg before procedure. Total dose 2.2-3.7 g. 15-58 yr old patients undergoing myelography or cisternography Enzyme immunoassay

BLOOD PLASMA; CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; NEUROLOGIC MANIFESTATIONS; ANTICONVULSANTS; DRUG THERAPY; DRUGS; MEASUREMENT METHODS
Rapeport, W.G.; Mendelow, A.D.; French, G.; MacPherson, P.; Teasdale, E.; Agnew, E.; Thompson, G.G.; Brodie, M.J. 1983 British Journal of Clinical Pharmacology 16:365-369

Tissue	Cases Exposure Route	Range	Mean	General Information
11009 Blood, serum	a) 17 b) 16 Ingestion	a) 20-63 ug/ml b) 30-123 Mg/ml	a) Not given b) Not given	a) Mothers b) Neonates Proportion of free to bound VPA is significant, Protein binding of VPA in the fetus is higher than in the mother. Cord serum levels are discussed. Epileptic mothers on therapy throughout pregnancy and delivery, their neonates, and normal adult controls. GC/MS

BLOOD SERUM; MILK; UMBILICAL CORD; FETUS; NEWBORN; ANTICONVULSANTS; PREGNANCY; TRANSPLACENTAL TRANSPER; DELIBERATE EXPOSURE
Heinz, N; Helge, H.; Luck, W. 1984 Journal of Pediatrics 104(4):627-634

Valeric acid, 2-propyl- (8 CI); Pentanoic acid, 2-propyl- (9 CI)
99-66-1
C8-H16-O2
MW 144.21, BP 120-121 C at 14 mm Hg, 128-130 C at 20 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
11010 Blood, serum	1 Ingestion	a) 44-5 mg/l b) 21-2.8 mg/l c) 1.8-0.4 mg/l d) 0.95-0.27 mg/l e) 41-2.4 mg/l f) 80-96 mg/l g) 50-66 mg/l	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given	a) Total (free & bound), 1 and 48 hr b) Total deuterated, 1 and 48 hr c) Free, 1 and 24 hr d) Free deuterated, 1 and 24 hr e) Total deuterated, 2 and 60 hr f) Total unlabeled and deuterated, peaks, 2, 12.5, and 27 hr g) Total unlabeled and deuterated, troughs, 0, 11, 26, 36.5, 49.5 and 61 hr a-d) After single 372 mg plus 182 (deuterated) mg dose, e)-g) multiple doses, 600 mg twice daily, one 600 mg deuterated dose substituted at time 0, day 5 of 8 days. Healthy volunteer, 41 yr, 65.64 kg GC; MS
BLOOD SERUM; SALIVA; DELIBERATE EXPOSURE; ADULTS; ANTICONVULSANTS; DRUGS; MEASUREMENT METHODS; METABOLISM; METABOLITES Acheampong, A.A.; Abbott, F.S.; Orr, J.M.; Ferguson, S.M.; Burton, R.W. 1984 Journal of Pharmaceutical Sciences 73(4):489-494				

Tissue	Cases Exposure Route	Range	Mean	General Information
11011 Blood, serum	10 Ingestion	a) 32.7-78.0 mg/l b) 31.3-73.5 mg/l c) 2.2-6.7 mg/l d) 2.1-6.2 mg/l	a) 50.4+/-14.9 mg/l b) 45.7+/-14.0 mg/l c) 3.4+/-1.3 mg/l d) 2.9+/-1.3 mg/l	a) Morning, total drug b) Evening, total drug c) Morning, unbound drug d) Evening, unbound drug Mean steady state levels. Peaks 1-3 hr after 250 mg at either 8 am or 8 pm for 5 d. Diurnal variation, evening levels lower ($p<0.001$ for b), <0.005 for d)). 7 males, 3 females, mean age 23.9 yr, mean wt 67.0 kg. Healthy, no drug usage except oral contraceptives. Fluorescence ensyme immunoassay
BLOOD SERUM; DELIBERATE EXPOSURE; DRUGS; CIRCADIAN RHYTHMS; METABOLISM Bauer, L.A.; Davis, R.; Wilensky, A.; Raleye, V.; Levy, R.H. 1984 Clinical Pharmacology and Therapeutics 35(4):505-509				

Tissue	Cases Exposure Route	Range	Mean	General Information
11012 Blood, serum	a) 25 b) 25 Ingestion	a) 19.2-98.8 mg/l b) 39.5-152.0 mg/l	a) 48.7+/-20.3 mg/l b) 88.2+/-22.3 mg/l	a) Peak at 1.8+/-1.1 hr after 11.2+/-6.9 mg/kg initial dose b) Peak at 1.3+/-0.5 hr after 45.9+/-26.2 mg/kg/d maintenance dose. Children with epilepsy, 15 males, 22 females, 1-14 yr old GC
BLOOD SERUM; DELIBERATE EXPOSURE; CHILDREN; NEUROLOGIC MANIFESTATIONS; ANTICONVULSANTS; DRUGS; DRUG THERAPY; DRUG INTERACTION; BIOACCUMULATION Cloyd, J.C.; Kriel, R.L.; Fischer, J.H.; Sawchuk, R.J.; Eggerth, R.M. 1983 Neurology 33:185-91				

Valeric acid, 2-propyl- (8 CI); Pentanoic acid, 2-propyl- (9 CI)
99-66-1
C8-H16-O2
MW 144.21, BP 120-121 C at 14 mm Hg, 126-130 C at 20 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
11013 Cerebrospinal fluid	17 Ingestion	4.2-25.6 mg/l	Not given	At time of contrast exam, after 30 mg/kg given at 20 hr on previous evening, and 15 mg/kg before procedure. Total dose 2.2-3.7 g. 15-58 yr old patients undergoing myelography or cisternography Enzyme immunoassay

BLOOD PLASMA; CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; NEUROLOGIC MANIFESTATIONS; ANTICONVULSANTS; DRUG THERAPY; DRUGS; MEASUREMENT METHODS
Rapeport, W.G.; Mendelow, A.D.; French, G.; MacPherson, P.; Teasdale, E.; Agnew, E.; Thompson, G.G.; Brodie, M.J. 1985 British Journal of Clinical Pharmacology 16:365-369

Tissue	Cases Exposure Route	Range	Mean	General Information
11014 Dialysis fluid	1 Ingestion	a) Not applicable b) Not applicable	a) 21.40 mg b) 16.15 mg	a) 24 hr recovery of 500 mg single dose. Amount was 4.3% of dose b) Steady-state 24 hr recovery after 350 mg, daily for 5 mo. Amount was 4.6% of dose Epileptic with impaired renal function, was being treated with phenobarbital and cloxacillin during study. 9 yr old patient GC/MS

DIALYSIS FLUID; DELIBERATE EXPOSURE; CHILDREN; KIDNEY DISEASES; NEUROLOGIC MANIFESTATIONS; ANTICONVULSANTS; DRUGS; DRUG THERAPY; DISEASES; BIOACCUMULATION
Orr, J.M.; Farrell, K.; Abbott, F.S.; Ferguson, S.; Godolphin, W.J. 1983 European Journal of Clinical Pharmacology 24:387-390

Tissue	Cases Exposure Route	Range	Mean	General Information
11015 Milk	18 Ingestion	0.50-1.58 ug/ml	Not given	Milk concentrations much lower than free concentrations in mothers' plasma Milk from epileptic mothers on therapy throughout pregnancy and delivery. GC/MSq

BLOOD SERUM; MILK; UMBILICAL CORD; FETUS; NEWBORN; ANTICONVULSANTS; PREGNANCY; TRANSPLACENTAL TRANSFER; DELIBERATE EXPOSURE
Heinz, N; Helge, H.; Luck, W. 1984 Journal of Pediatrics 104(4):627-634

Valeric acid, 2-propyl- (8 CI); Pentanoic acid, 2-propyl- (9 CI)
99-66-1
C8-H16-O2
MW 144.21, BP 120-121 C at 14 mm Hg, 126-130 C at 20 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
11016 Saliva	1 Ingestion	a) 6.1-1.5 mg/l b) 2.6-0.00 mg/l c) 0.8-1.3 mg/l d) 0.5-0.8 mg/l e) 0.5-0.1 mg/l	a) Not given b) Not given c) Not given d) Not given e) Not given	a) Unlabeled, at 0.5 and 12 hr b) Deuterated, at 0.5 and 12 hr c) Peaks 1, 13, and 27 hr d) Troughs, 11 and 26 hr e) Deuterated, 1 and 25 hr a-b) after single 572 mg plus 182 (deuterated) mg dose. c)-e) multiple 600 doses, twice daily, one 600 mg deuterated dose substituted at time 0, day 5 of 8 days. Healthy volunteer, 41 yr, 63.44 kg GC; MS
BLOOD SERUM; SALIVA; DELIBERATE EXPOSURE; ADULTS; ANTICONVULSANTS; DRUGS; MEASUREMENT METHODS; METABOLISM; METABOLITES Achcompong, A.A.; Abbott, F.S.; Orr, J.M.; Ferguson, S.M.; Burton, R.W. 1984 Journal of Pharmaceutical Sciences 73(4):489-494				

Valeric acid, 2-propyl-, sodium salt (8 CI); Pentanoic acid, 2-propyl-, sodium salt (9 CI)
1069-66-5
C8-H15-O2.Na
MW 167.20

Tissue	Cases Exposure Route	Range	Mean	General Information
11017 Blood, serum	a) 1 b) 1 c) 1 Ingestion	a) 800-1650 umol/l b) 650-1000 umol/l c) 550-850 umol/l	a) Not given b) Not given c) Not given	a) Before dose of 1600 mg/d, and on 9th d of hepatitis when dose was cut to 800, then 600 mg/d, and withdrawn on d 13. After improvement, half-dosages resumed, achieving therapeutic levels (850-600 umol/l) b) Day 6-8 of hepatitis, dose 1400 mg/d, withdrawn on day 8, later resumed c) During hepatitis on 1200-1600 mg/d , Peak at 1600 mg/d Gradual reintroduction may be safe after hepatitis A. Other anticonvulsants also included in regimens. 9, 12 and 26 yr-old epileptics, United Kingdom
BLOOD SERUM; DELIBERATE EXPOSURE; UNITED KINGDOM; CASE HISTORIES; NERVOUS SYSTEM DISEASES; LIVER DISEASES; ANTICONVULSANTS; DRUGS; METABOLISM; DRUG THERAPY Dowling, S.J. 1984 Lancet 1(8388):968-964				

Tissue	Cases Exposure Route	Range	Mean	General Information
11018 Blood, serum	1 Ingestion	1061-187 ug/ml	Not given	8-46 hr after 12 g. Peak 3 hr. Death from cardiorespiratory failure. 20-mo old boy, accidental poisoning victim, Germany Temporary coma. Bacterial bronchopneumonia developed after 16 hr. Acute hypoxic damage to myocardium, kidneys, and vulnerable cerebral neurons. Substantial brain edema.
BLOOD SERUM; DELIBERATE EXPOSURE; GERMANY; CASE HISTORIES; INFANTS; NEUROLOGIC MANIFESTATIONS; RESPIRATORY DISEASES; ANTICONVULSANTS; DRUGS; ACCIDENTAL POISONING Schaubel, R.; Rambeck, B.; Jansen, F. 1984 Lancet 1(8370):221-223				

Valeric acid, 2-propyl-, sodium sal. (8 CI); Pentanoic acid, 2-propyl-, sodium salt (9 CI)
1069-66-5
C8-H16-O2.Na
MW 167.25

Tissue	Cases Exposure Route	Range	Mean	General Information
11019 Blood, serum	7	a) 210-860 umol/l b) 168-620 umol/l c) 168-490 umol/l	a) 418.6 umol/l b) 369.2 umol/l c) 285 umol/l	a) Day 28. Concomitant with 18.7 mg/kg carbamazepine in 3 doses/d b) Day 56. With carbamazepine 2X/d during wk 5-8 c) Day 84. With carbamazepine 1X/d during wk 9-12 Ranges of means at 7-8 hr before medication. Daily dose of 750-2500 mg valproate/patient, and regimen, unaltered during 12 wk. Total daily carbamazepine constant. 16-18 yr old epileptics
BLOOD SERUM; DELIBERATE EXPOSURE; CENTRAL NERVOUS SYSTEM DISEASES; ANTICONVULSANTS; DRUG INTERACTION; DRUG THERAPY; DRUGS; COMPARATIVE EVALUATIONS; METABOLISM; METABOLITES Ghose, K.; Pry, D.B.; Christödes, J.A. 1985 European Journal of Clinical Pharmacology 24:575-581				

Tissue	Cases Exposure Route	Range	Mean	General Information
11020 Blood, serum	1	249-857 umol/L	Not given	During treatment with 400-800 mg/d Marked improvement in dyskinetic movements. Large-scale control study suggested. Patient with severe tardive dyskinesia
BLOOD SERUM; DELIBERATE EXPOSURE; CASE HISTORIES; NEUROMUSCULAR DISEASES; DRUG THERAPY; DRUGS Ames, D.; Webber, J. 1984 Medical Journal of Australia 140:850				

Valeric acid, 2,3-dimethyl-5-(2,5-xylyloxy)- (8 CI); Pentanoic acid, 5-(2,5-dimethylphenoxy)-2,3-dimethyl- (9 CI)
26513-80-0
C15-H22-O3

Tissue	Cases Exposure Route	Range	Mean	General Information
11021 Blood, plasma	12	5-1 ug/ml	Not applicable	0-8 hr, peak (14 ug/ml) at 1.5 hr after 300 mg oral dose New assay. GC
11022 Urine	12	a) 14-45% b) 9-57%	a) 27.4% b) 33.2%	a) Parent compound b) Metabolite III % dose. GC
BLOOD PLASMA; DELIBERATE EXPOSURE; DRUG THERAPY; DRUGS; LIPIDS; BIOLOGICAL MONITORING Randinitis, E.J.; Kinkel, A.W.; Nelson, C.; Parker, T.D. 1984 Journal of Chromatography 307:210-215				

Valeronitrile, 5-((3,4-dimethoxyphenethyl)methylamino)-2-(3,4-dimethoxyphenyl)-2-isopropyl- (8 CI) Benzeneacetonitrile, alpha-(3-((2-(3,4-dimethoxyphenyl)ethyl)methylamino)propyl)-3,4-dimethoxy-alpha- (1-methylethyl)- (9 CI)
52-53-9
C27-H38-N2-O4
MW 454.59, BP 245-246 C at 0.01 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
11028 Blood, plasma	11 Ingestion	a) 0-150 ng/ml b) 25-300 ng/ml c) 90-500 ng/ml d) Not given e) Not given f) Not given	a) 92+/-30 ng/ml b) 207+/-26 ng/ml c) 331+/-24 ng/ml d) 50 ng/ml e) 150 ng/ml f) 250 ng/ml S.E.	a) 240 mg/day b) 360 mg/day c) 480 mg/day d) 300 mg/day e) 400 mg/day f) 600 mg/day Ranges for a)-c) and doses estimated from graph Adult, ambulatory patients, 26-65 yr, mild to moderate essential hypertension Reduction in blood pressure. Constipation, pedal edema, maculopapular rash in 1 subject each HPLC; Fluorometry
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; VASODILATORS; COMPARATIVE EVALUATIONS; BLOOD PRESSURE Halperin, A.K.; Grose, K.M.; Rogers, J.F.; Cubeddu, L.X.; 1984 Clinical Pharmacology and Therapeutics 36(6):750-756				

Tissue	Cases Exposure Route	Range	Mean	General Information
11024 Blood, plasma	a) 5 b) 5 Ingestion	a) 62.6+/-19.8-4.3+/-2.9 ng/ml b) 218+/-125-14+/-5.8 ng/ml	a) Not applicable b) Not applicable	a) 120 mg dose b) 240 mg dose, 2 and 24 hr after single oral doses. Peaks at 2 hr in 7 patients, 4 hr in 3 patients. Ranges of means. Patients with chronic stable angina, mean age 53 yr (range 30-66 yr) withdrawn from drug over 2 wk period after 1 yr open label trial HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; HEART DISEASES; ANTIARRHYTHMIC AGENTS; DRUGS; DRUG THERAPY Weiner, D.A.; McCabe, C.H.; Cutler, S.S.; Ryan, T.J.; Klein, M.D. 1984 Clinical Pharmacology and Therapeutics 36(1):26-32				

Tissue	Cases Exposure Route	Range	Mean	General Information
11025 Blood, plasma	8 Ingestion Injection	a) Not given b) Not given c) Not given d) Not given	a) 368+/-187 ng/ml b) 150+/-116 ng/ml c) 352+/-192 ng/ml d) 170+/-70 ng/ml	a) Controls, maximum after 10 mg IV b) Controls, maximum after 120 mg oral c) Cimetidine pretreated (800 mg/6 hr for 8 d), maximum after 10 mg IV d) Cimetidine pretreated (800 mg/6 hr for 8 d), maximum after 120 mg oral Despite inducing rise in bioavailability, cimetidine had no effect on kinetics. Healthy volunteers, 24-36 yr old HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; GASTROINTESTINAL DISEASES; DRUG INTERACTION; DRUGS; BIOACCUMULATION; BIOAVAILABILITY Smith, M.S.; Benyunes, M.C.; Bjornsson, T.D., Shand, D.G.; Pritchett, E.L.C. 1984 Clinical Pharmacology and Therapeutics 36(4):551-554				

Valeronitrile, 5-((3,4-dimethoxyphenethyl)methylamino)-2-(3,4-dimethoxyphenyl)-2-isopropyl- (8 CI) Benzeneacetonitrile, alpha-(3-((2-(3,4-dimethoxyphenyl)ethyl)methylamino)propyl)-3,4-dimethoxy-alpha- (1-methylethyl)- (9 CI)
52-53-9
C37-H58-N2-O4
MW 484.69, BP 248-248 C at 0.01 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
11036 Blood, plasma	8 Ingestion	a) Not given b) Not given	a) 247+/-147 ng/ml b) 222+/-144 ng/ml	a) Peak, 160 mg verapamil alone b) Peak, dose with 1 mg prazosin Healthy adults with normotension, 20-40 yr Orthostasis HPLC; Fluorescence
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; ANTIHYPERTENSIVE AGENTS; DRUGS; DRUG INTERACTION; VASODILATORS; COMPARATIVE EVALUATIONS; BLOOD PRESSURE Pasanisi, F.; Elliott, H.L.; Meredith, P.A.; McSharry, D.R.; Reid, J.L. 1984 Clinical Pharmacology and Therapeutics 36(6):716-723				

Valine, L- (8 CI); L-Valine (9 CI)
72-18-4
C5-H11-N-O2
MW 117.16, MP 315 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11027 Blood, plasma	16 Ingestion	a) 200-500 umol/l b) 230-450 umol/l c) 204+/-9-198+/-12 umol/l	a) Not given b) Not given c) Not given	a) 62.5 mg/kg valine. Peak 940 umol/l at 30 min. 8 cases b) 62.5 mg/kg ketoisovaleric acid. Peak 48 umol/l at 45 min. Same 8 as a). 7 d prior to a) c) Controls, physiologic saline. Peak 206 umol/l at 90 min. 8 cases 0 and 180 min after dose. Healthy volunteers, staff members and medical students, 23-41 yr old, wt 55-77 kg. Controls, healthy volunteers, 18-51 yr old, wt 55-88 kg Decline in leucine, isoleucine and ornithine levels GC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS Schauder, P.; Schroder, K.; Herberts, L.; Henning, H.V.; Langenbeck, U. 1984 Journal of Laboratory and Clinical Medicine 103(4):597-605				

Valine, 2-mercapto-, D- (8 CI); D-Valine, 2-mercapto- (9 CI)
52-67-5
C5-H11-N-O2-S
MW 149.21, MP 166.5 C (D-form)

Tissue	Cases Exposure Route	Range	Mean	General Information
11026 Blood, plasma	6 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 3.05+/-1.03 ug/ml b) 1.51+/-0.30 ug/ml c) 1.00+/-0.46 ug/ml d) 1.72+/-0.61 ug/ml	a) 2.8+/-0.4 hr after overnight fast b) 2.3+/-1.0 hr after standard breakfast c) 1.3+/-0.9 hr after 300 mg ferrous sulfate d) 3.0+/-1.1 hr after antacid mixture (1200 mg Mg-hydroxide, 1350 mg Al-hydroxide, 150 mg simethicone) Doses: 500 mg. Mean peaks Healthy 22-39 yr olds, wt 56-77 kg HPLC
11029 Urine	6 Ingestion	a) 35.0-38.8% of dose b) 21.0-22.8% of dose c) 11.7-12.9% of dose d) 22.0-24.1% of dose	a) Not given b) Not given c) Not given d) Not given	a) After overnight fast b) After standard breakfast c) After 300 mg ferrous sulfate d) After antacid (1200 mg Mg-hydroxide, 1350 mg Al-hydroxide, 150 mg simethicone) Unchanged drug, 12 and 24 hr after 500 mg Healthy 22-39 yr olds, wt 56-77 kg HPLC
ADULTS; RHEUMATOID ARTHRITIS; BLOOD PLASMA; URINE; DRUGS; COMPARATIVE EVALUATIONS Osman, M.A.; Patel, R.B.; Schuna, A.; Sundstrom, W.R.; Welling, P.G. 1983 Clinical Pharmacology and Therapeutics 33(4):465-470				

Vancomycin
1404-90-6
C66-H75-Cl2-N9-O24
MW approx 3300

Tissue	Cases Exposure Route	Range	Mean	General Information
11080 Blood, serum	a) 6 b) 6 Injection	a) 7-9.25 ug/ml b) 6-9.7 ug/ml	a) Not given b) Not given	a) 20-30 yr olds (mean 23 yr). Peak 11.5 ug/ml at 1 hr b) 61-77 yr old (mean 68 yr). Peak 10.9 ug/ml at 1 hr 0.17 and 36 hr after start of 6 mg/kg infused over 1 hr. Estimated from graph. Healthy volunteers Facial flushing if infused too quickly RIA
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ADULTS; AGE; ANTIBIOTICS; DRUGS Cutler, N.R.; Narang, P.K.; Leeke, L.J.; Nimoy, M.; Power, M. 1984 Clinical Pharmacology and Therapeutics 36(6):803-810				

Vancomycin
1404-90-6
C66-H75-Cl2-N9-O24
MW approx 3300

Tissue	Cases Exposure Route	Range	Mean	General Information
11081 Blood, serum	4 Injection	a) 19-36 mg/L b) 6.5-9 mg/L	a) Not given b) Not given	a) Peaks, end of 30 min infusion, 10 mg/kg b) 70 hr after dose Estimated from graph. 25-78 yr olds with end stage renal disease. Continuous ambulatory peritoneal dialysis RIA
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; ANTIBIOTICS; DRUGS; DIALYSIS FLUID Blevins, R.D.; Halstenson, C.E.; Salem, N.G.; Matzke, G.R. 1984 Antimicrobial Agents and Chemotherapy 25(5):608-606				

Tissue	Cases Exposure Route	Range	Mean	General Information
11082 Blood, serum	a) 6 b) 6 Injection Dialysis	a) 25-7 ug/ml b) 2.1-2.6 ug/ml	a) Not applicable b) Not applicable	a) 30 min-72 hr, rapid decline from 25-12 ug/ml in 3 hr, moderate decline thereafter, after 10 mg/kg IV b) 1-72 hr, peak (6.3 ug/ml) at 4 hr, after 4 hr dwell of 10 mg/kg in 2 L dialysate Patients undergoing continuous ambulatory peritoneal dialysis for at least 1 mo. Patients, 48+/-10 yr (IV group), 54+/-4 yr (IP group) Well-diffusion
BLOOD SERUM; DIALYSIS FLUID; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION Bunke, C.M.; Aronoff, G.R.; Brier, M.E.; Sloan R.S.; Luft, F.C. 1983 Clinical Pharmacology and Therapeutics 34(5):631-637				

Tissue	Cases Exposure Route	Range	Mean	General Information
11083 Blood, serum	4 Injection	a) 25-9 ug/ml b) 66-6.5 ug/ml c) 7.8-4.5 ug/ml d) 10.0-6.5 ug/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 1-4 d, peak (25 ug/ml) after 1 g IV, 3 cases, estimated from graph b) 1-20 d, peak (66 ug/ml) 4 hr after 1 g IV, 1 case, estimated from graph c) 5-12 d after 1 g IV, 1 case d) 9-20 d after 2 g IV, 1 case Levels above 4 ug/ml effective in treatment of staphylococcal infections. Patients with end-stage renal disease, 49-67 yr old RIA; Microbiological
BLOOD SERUM; PERITONEAL FLUID; DIALYSIS FLUID; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION Magera, B.E.; Arroyo, J.C.; Rosansky, S.J.; Postic, B. 1983 Antimicrobial Agents and Chemotherapy 23(5):710-714				

Vancomycin
1404-90-6
C66-H75-Cl2-N8-O24
MW approx 1500

Tissue	Cases Exposure Route	Range	Mean	General Information
11084 Dialysis fluid	4 Injection	1.0-4.9 mg/l	2.2+/-0.7 mg/l	During 72 hr after single 10 mg/kg dose. 28-78 yr olds with end stage renal disease. Continuous ambulatory peritoneal dialysis RIA
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; ANTIBIOTICS; DRUGS; DIALYSIS FLUID Blevins, R.D.; Halstenson, C.E.; Salem, N.G.; Matuhe, G.R. 1984 Antimicrobial Agents and Chemotherapy 25(5):603-606				

Tissue	Cases Exposure Route	Range	Mean	General Information
11086 Dialysis fluid	a) 6 b) 6 Injection Dialysis	a) 4.1+/-0.9-1.8+/-0.6 ug/ml b) 106+/-26-1.62+/-0.7 ug/ml	a) Not applicable b) Not applicable	a) 0-4 to 20-32 hr (dwell), total collected in 72 hr was 15% of 10 mg/kg IV b) 0-4 to 12-24 hr (dwell), total collected in 72 hr was 17% of 10 mg/kg in 2 L dialysate Patients undergoing continuous ambulatory peritoneal dialysis for at least 1 mo. Patients, 43+/-10 yr (IV group), 54+/-4 yr (IP group) Well-diffusion
BLOOD SERUM; DIALYSIS FLUID; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION Bunke, C.M.; Aronoff, G.R.; Brier, M.E.; Sloan R.S.; Luft, F.C. 1983 Clinical Pharmacology and Therapeutics 34(5):631-637				

Tissue	Cases Exposure Route	Range	Mean	General Information
11086 Dialysis fluid	a) 1 b) 1 Injection	a) 1.5-1.1 ug/ml b) 0.45-0.33 ug/ml	a) 1.2 ug/ml b) 0.38 ug/ml	a) Steady-state on days 1, 2, and 3 b) Steady-state on days 3, 4, and 6 After 1 g IV. Patients undergoing chronic intermittent peritoneal dialysis. Patients with end-stage renal disease, 49-67 yr old RIA; Microbiological
11087 Peritoneal fluid	a) 1 b) 1 Injection	a) 7.5-4 ug/ml b) 30-8 ug/ml	a) Not applicable b) Not applicable	a) 3-13 d after 1 g IV b) 1-18 d after 2 g IV Peritoneal fluid that was present after overnight rest period from dialysis. Patients with end-stage renal disease, 49-67 yr old RIA; Microbiological
BLOOD SERUM; PERITONEAL FLUID; DIALYSIS FLUID; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION Magera, B.E.; Arroyo, J.C.; Rosansky, S.J.; Postic, B. 1983 Antimicrobial Agents and Chemotherapy 23(5):710-714				

Vancomycin
1404-90-6
C66-H75-Cl2-N9-O24
MW approx 3300

Tissue	Cases Exposure Route	Range	Mean	General Information
11088 Urine	a) 6 b) 6 Injection	a) Not given b) Not given	a) 400 mg b) 310 mg	a) 20-26 yr olds (mean 23 yr) b) 61-77 yr olds (mean 68 yr) Cumulative excretion for 24 hr after single 6 mg/kg dose. Estimated from graph. Healthy volunteers Facial flushing if infused too quickly RIA
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ADULTS; AGE; ANTIBIOTICS; DRUGS Cutler, N.R.; Narang, P.K.; Lesko, L.J.; Ninos, M.; Power, M. 1984 Clinical Pharmacology and Therapeutics 36(6):803-810				

Vincaleukoblastine
865-21-4
C46-H58-N4-O9
MW 811.08, MP 211-216 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11089 Blood, plasma	1 Injection	a) 20-2.9 ng/ml b) 1.0-0.65 ng/ml	a) Not applicable b) Not applicable	a) Bolus dose, 7.5 mg/sq m IV, 0 and 24 hr b) 3 mo later, continuous infusion, 1.0 mg/sq m, 0 and 96 hr Estimated from graph. Representative of 13 cases. Patient with advanced breast cancer HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; NEOPLASMS; ANTITUMOR AGENTS; DRUGS; DRUG THERAPY; CHEMOTHERAPY; BIOLOGICAL MONITORING Lu, K.; Yap, H.; Loo, T.L. 1985 Cancer Research 45:1405-1408				

Vitamin A
11108-57-4
EXACT COMPOSITION UNKNOWN OR UNDETERMINED

Tissue	Cases Exposure Route	Range	Mean	General Information
11060 Blood, plasma	59 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) 84.4+/-4.2-80.1+/-3.5 ug/dL	a) 57.8+/-6.5 ug/dL b) 48.0+/-3.5 ug/dL c) 60.6+/-3.0 ug/dL d) 53.0+/-3.8 ug/dL e) 57.0+/-3.3 ug/dL f) 51.0+/-3.6 ug/dL g) 48.0+/-6.7 ug/dL h) 42.9+/-3.4 ug/dL i) Not given S.E.	a) Baseline, alpha-tocopherol group, 15 cases b) 16 wk, 800 IU/d, alpha-tocopherol c) Baseline, retinyl palmitate group, 15 cases d) 16 wk, 25000 IU/d retinyl palmitate, 16 of c) e) 16 wk, 25000 IU/d retinyl palmitate, wk 1-16 and 800 IU/d alpha-tocopherol, wk 8-16, 6 of c) f) Baseline, beta-carotene group, 14 cases g) 16 wk, 30 mg/d beta-carotene, 4 of f) h) 16 wk, 30 mg/d beta-carotene, wk 1-16 and 800 IU/d alpha-tocopherol, wk 8-16, 5 of f) i) Baseline and 16 wk, controls, placebo 1x/d Additional data given. 23-57 yr old healthy laboratory staff volunteers not taking vitamin supplements HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; COMPARATIVE EVALUATIONS; VITAMIN A; VITAMIN E; CAROTENOIDS Willett, W.C.; Stampfer, M.J.; Underwood, B.A.; Taylor, J.O.; Hennekens, C.H. 1983 American Journal of Clinical Nutrition 38:559-566				

Tissue	Cases Exposure Route	Range	Mean	General Information
11041 Blood, serum	184 Ingestion	a) 9.8+/-1.92-15.4+/-1.00 ug/dl b) 17.0+/-1.27-24.9+/-1.66 ug/dl c) 15.7+/-0.84-20.0+/-0.91 ug/dl d) 28.5+/-1.28-31.3+/-1.15 ug/dl S.E.	a) 13.6+/-0.40 b) Not given c) 19.6+/-0.64 d) Not given S.E.	a) Mixed cord blood, at delivery. Full-term infants, low-income group b) Mothers of a) venous blood after delivery c) Mixed cord blood, at delivery. Full-term infants, high-income group d) Mothers of c), venous blood after delivery Ranges of means, a) and b) for 3 birth-wt groupings: <2, 2-3, and 3 kg. c) and d) for two groupings: 2-3 and >3 kg. Lower values, some significantly so, found in comparable groups of premature infants and their mothers. Significant correlations between cord serum levels, maternal serum levels, gestational age, and growth status. Mother-newborn pairs in low and high income groups, India.
BLOOD SERUM; CONSUMER EXPOSURE; INDIA; NEWBORN; ADULTS; VITAMIN A; DIETS; PREGNANCY; TRANSPLACENTAL TRANSFER Shah, R.S.; Rajalakshmi, R. 1984 American Journal of Clinical Nutrition 40:794-800				

Tissue	Cases Exposure Route	Range	Mean	General Information
11042 Blood, serum	a) 1 b) 1 c) 1 Ingestion	a) <0.17-1.8 umol/l b) <0.17-<1.05 umol/l c) 0.2-1.0 umol/l	a) Not given b) Not given c) Not given	a) 0 to 74 d, peak at 74. Dose regimen: 50,000 U daily, d 4-11, 25,000 U d 12-40 Dose stopped at d 41, restarted at 25,000 U on d 60 b) Length of study not given, peak after 5 d. Dose regimen: 50,000, U daily d 0-5, 25,000 U thereafter c) 7-22 d, peak at 22. Dose regimen: 25,000 U daily d 15-22 Normal levels full recovery of visual dark adaption with oral supplement. Prior i.m. injections were ineffective in a) and c). Biliary cirrhosis patients with night blindness
BLOOD SERUM; DELIBERATE EXPOSURE; CASE HISTORIES; LIVER DISEASES; VITAMIN A; DRUGS; DRUG THERAPY Walt, R.P.; Kemp, C.M.; Lyness, L.; Bird, A.C.; Sherlock, S. 1984 British Medical Journal 288:1080-1081				

Xylose, D- (8 CI); D-Xylose (9 CI)
58-86-6
C5-H10-O5
MW 150.13, MP 144-145 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11048 Blood, plasma	8 Ingestion Injection	a) 190-50 mg/l b) 205-10 mg/l c) 175-10 mg/l d) 200-50 mg/l e) 200-0 mg/l	a) Not given b) Not given c) Not given d) Not given e) Not given	a) Subject 1. Peak 490 mg/l at 20 min b) Subject 2. Peak 480 mg/l at 20 min c) Subject 3. Peak 400 mg/l at 20 min d) Subject 1. Peak 650 mg/l at 1 hr e) Subject 2. Peak 500 mg/l at 1 hr f) Subject 3. Peak 390 mg/l at 1 hr a-c) 5 min and 6 hr after 25 g, oral. d)-f) 5 min and 10 hr after 5 g IV. Doses after overnight fast. Estimated from graph. New method with less health risks to technical personnel. Volunteers Colorimetry
BLOOD PLASMA; DELIBERATE EXPOSURE; DRUGS; DIAGNOSTIC AGENTS; MEASUREMENT METHODS Johnson, S.L.; Bliss, M.; Mayerssohn, M.; Conrad, K.A. 1984 Clinical Chemistry 30(9):1571-1574				

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11044 Blood	20 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 64.8+/-21.0 ug/dl b) 109.0+/-21.0 ug/dl c) 60.3+/-17.9 ug/dl d) 59.8+/-19.3 ug/dl	a) 8 patients before Zn b) 600 mg Zn/d for 7 d c) 12 controls d) 8d later Controls given placebo. Significant difference ($p<0.01$) a), b). Significant improvement in trailmaking test a), b) Cirrhotic with chronic encephalopathy, adults, mean age 52, Belgium
BLOOD; DELIBERATE EXPOSURE; BELGIUM; ADULTS; CIRRHOSIS; ZINC; COPPER; TRACE ELEMENTS; METALS; DRUGS Reding, P.; Duchateau, J.; Bataille, C. 1984 Lancet 2(8401):493-494				

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11065 Blood, plasma	a) 11 b) 10 c) 12 d) 11 Ingestion	a) 129+/-36-156+/-45 ug/dl b) 151+/-30-146+/-27 ug/dl c) 146+/-21-171+/-50 ug/dl d) 135.6+/-31-151.6+/-41 ug/dl	a) Not given b) Not given c) Not given d) Not given	a) Endurance-trained, 50 mg/d as sulfate. 2, 4, 6, 8 wk, peak at 8 wk, base level 139 ug/dl b) Endurance-trained, placebo. 2, 4, 6, 8 wk, peak, base level same c) Sedentary, 50 mg/d as sulfate. 2, 4, 6, 8 wk, peak at 8 wk, base level 147 ug/dl d) Sedentary, placebo. 2, 4, 6, 8 wk, peak at 4 wk, base level 141.2 ug/dl Ranges of means Healthy 20-55 yr old males No significant effects on plasma levels of HDL-C, LDL-C, total cholesterol or triglycerides AAS
BLOOD PLASMA; DELIBERATE EXPOSURE; UNITED STATES; COMPARATIVE EVALUATIONS; ZINC; DIETS; DRUGS Crouse, S.F.; Hooper, P.L.; Atterbom, H.A.; Papenfuss, R.L. 1984 Journal of the American Medical Association 252(6):785-787				

Tissue	Cases Exposure Route	Range	Mean	General Information
11066 Blood, plasma	8 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 89.5+/-5.1 ug/dl b) 86.8+/-7.3 ug/dl c) 87.0+/-3.2 ug/dl d) 89.0+/-8.0 ug/dl e) 82.1+/-5.0 ug/dl f) 76.0+/-3.2 ug/dl g) 108.3+/-6.6 ug/dl h) 94.5+/-7.0 ug/dl	a) At start of study b) Same as a), with folic acid c) End of low Zn diet plus 4 mg/d d) Same as b), with folic acid e) End of low Zn diet f) Same as e), with folic acid g) End of low Zn diet plus 30 mg/d h) Same as g), with folic acid b) , c), e), f), and h) 400 ug folic acid every other day. Healthy male volunteers, 19-58 yr old, in Zn-deficiency studies between 1979 and 1981. In closely supervised metabolic unit, carefully controlled diets. AAS
URINE; BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; COMPARATIVE EVALUATIONS; VITAMINS; ZINC; COPPER; IRON Milne, D.B.; Canfield, W.K.; Mahalko, J.R.; Sandstead, H.H. 1984 American Journal of Clinical Nutrition 39:535-539				

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 908 C, VP 1 mm Hg at 487 C, 10 mm Hg at 590 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11047 Blood, serum	11	a) 64-85 ug/dl b) 73-98 ug/dl c) 52-103 ug/dl d) 77-114 ug/dl e) 68-76 ug/dl f) 107-151 ug/dl g) Not given h) Not given i) Not given	a) 72 ug/dl b) 87 ug/dl c) 57 ug/dl d) 71 ug/dl e) 71 ug/dl f) 121 ug/dl g) 96 ug/dl h) 169 ug/dl i) 89 ug/dl S.E.	a) Before 50 mg/d, 15-22 days of lactation b) After therapy c) Before 100 mg/d, 5-46 days of lactation d) After therapy e) Before 150 mg/d, 42-75 days of lactation f) After therapy g) Mother with Zn deficient infant, before 60 mg/d for 2 wk h) After therapy i) 8 wk after discontinuing therapy Therapy in a)-f) for 1 wk. Level in infant was 16 ug/dl (normal 70-140 ug/dl). 20-34 yr old women, 5 mo old infant AAS
BLOOD SERUM; MILK; INFANTS; ADULTS; NUTRITIONAL DEFICIENCIES; COPPER; ZINC; PREMATURE INFANTS; LACTATION; DELIBERATE EXPOSURE; DRUGS Moore, M.E.C.; Moran, J.R.; Greene, H.L. 1984 Journal of Pediatrics 105(4):600-602				

Tissue	Cases Exposure Route	Range	Mean	General Information
11048 Blood, serum	37 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given	a) 126+/-33 ug/dL b) 103+/-31 ug/dL c) 88+/-30 ug/dL d) 77+/-20 ug/dL e) 87+/-40 ug/dL f) 138+/-36 ug/dL g) 121+/-22 ug/dL h) 118+/-20 ug/dL i) 127+/-27 ug/dL j) 113+/-28 ug/dL	a) Day 1, enteral, n=14 b) Day 7, enteral, n=14 c) Day 14, enteral, n=13 d) Day 21, enteral, n=7 e) Day 28, enteral, n=5 f) Day 1, parenteral, n=20 g) Day 7, parenteral, n=18 h) Day 14, parenteral, n=19 i) Day 21, parenteral, n=10, significantly different from d), $p<0.01$ j) Day 28, parenteral, n=5 Enterally fed preterm infants, no additional trace element supplements. Totally or partially parenterally fed preterm infants supplemented with Zn and Cu at 350 and 20 ug/kg/d, respectively. Preterm infants in neonatal intensive care unit, Hamilton, Ontario, Canada, Jan-Sept 1982 NA
COPPER; ZINC; SELENIUM; BLOOD SERUM; CANADA; PREMATURE INFANTS; DIETS; INGESTION; DELIBERATE EXPOSURE; TRACE ELEMENTS; DRUGS Friel, J.K.; Gibson, R.S.; Pellowski, A.; Watts, J. 1984 Journal of Pediatrics 104(5):763-768				

Zinc
7440-66-6
Zn
AtW 65.38, MP 419.5 C, BP 906 C, VP 1 mm Hg at 487 C, 10 mm Hg at 560 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11040 Milk	11	a) 90-675 ug/dl b) 100-500 ug/dl c) 275-525 ug/dl d) 90-350 ug/dl e) 65-150 ug/dl f) 75-168 ug/dl g) Not given h) Not given i) Not given	a) 348 ug/dl b) 258 ug/dl c) 350 ug/dl d) 285 ug/dl e) 105 ug/dl f) 114 ug/dl g) 85 ug/dl h) 80 ug/dl i) 23 ug/dl S.E.	a) Before 50 mg/d, 15-22 days of lactation b) After therapy c) Before 100 mg/d, 5-46 days of lactation d) After therapy e) Before 150 mg/d, 42-75 days of lactation f) After therapy g) Mother with Zn deficient infant, before 60 mg/d for 2 wk h) After therapy i) 8 wk after discontinuing therapy Therapy in a)-f) for 1 wk. Normal levels after 5 mo lactation 18-120 ug/dl. 20-34 yr old women AAS
BLOOD SERUM; MILK; INFANTS; ADULTS; NUTRITIONAL DEFICIENCIES; COPPER; ZINC; PREMATURE INFANTS; LACTATION; DELIBERATE EXPOSURE; DRUGS Moore, M.E.C.; Moran, J.R.; Greene, H.L. 1984 Journal of Pediatrics 105(4):600-602				

Tissue	Cases Exposure Route	Range	Mean	General Information
11060 Urine	6 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0.45+/-0.11 mg/d b) 0.38+/-0.10 mg/d c) 0.54+/-0.17 mg/d d) 0.28+/-0.09 mg/d e) 1.02+/- 0.21 mg/d f) 0.48+/-0.16 mg/d	a) Low Zn diet plus 4 mg/d, 42 d b) Same as a), plus folic acid c) Low Zn diet, 126 d d) Same as c), plus folic acid e) Low Zn diet plus 30 mg/d, 24 d f) Same as e), plus folic acid b) , d), and f) 400 ug folic acid every other day. Healthy male volunteers, 19-58 yr old, in Zn-deficiency studies between 1979 and 1981. In closely supervised metabolic unit, carefully controlled diets. AAS
URINE; BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; COMPARATIVE EVALUATIONS; VITAMINS; ZINC; COPPER; IRON Milne, D.B.; Canfield, W.K.; Mahalko, J.R.; Sandstead, H.H. 1984 American Journal of Clinical Nutrition 39:535-539				

Tissue	Cases Exposure Route	Range	Mean	General Information
11061 Urine	6 Ingestion	a) 1.3-0.85 mg b) 0.85-0.4 mg	a) Not given b) Not given	a) Day 1-12, 15 mg/d b) Day 12-36, 1.5 mg/d Daily excretion. Estimated from graph. Subjects given synthetic diet. Total absorption estimated from fecal output 0.95-4.43 mg. Healthy male MIT students, mean age 22 yr, mean wt 72 kg AAS
URINE; DELIBERATE EXPOSURE; MASSACHUSETTS; ADULTS; DRUGS; ZINC; METALS; MINERALS Istfan, N.W.; Janghorbani, M.; Young, V.R. 1983 American Journal of Clinical Nutrition 38:187-194				

1-Adamantanamine (8 CI); Tricyclo(3.3.1.1(3,7))decan-1-amine (9 CI)
768-94-5
C10-H17-N
MW 151.26, MP 160-190 C, 180-192 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11062 Bile	1 Ingestation	Not applicable	418.6 mg/L	After 16 hr in custody following automobile accident. Drug history included trifluoroperazine and phencyclidine. Male Violent behavior Contusions, abrasions, congestion of brain and meninges, pulmonary edema and congestion, most probably result of violent behavior. GLC
11063 Blood	1 Ingestion	Not applicable	21.0 mg/l	After 16 hr in custody following automobile accident. Drug history included trifluoroperazine and phencyclidine. Male Violent behavior Contusions, abrasions, congestion of brain and meninges, pulmonary edema and congestion, most probably result of violent behavior. GLC
11064 Liver	1 Ingestion	Not applicable	138.4 mg/kg	After 16 hr in custody following automobile accident. Drug history included trifluoroperazine and phencyclidine. Male Violent behavior Contusions, abrasions, congestion of brain and meninges, pulmonary edema and congestion, most probably result of violent behavior. GLC
11065 Urine	1 Ingestation	Not applicable	1380.0 mg/L	After 16 hr in custody following automobile accident. Drug history included trifluoroperazine and phencyclidine. Male Violent behavior Contusions, abrasions, congestion of brain and meninges, pulmonary edema and congestion, most probably result of violent behavior. GLC

DRUGS; AUTOPSIES; DRUG ABUSE; DELIBERATE EXPOSURE; BEHAVIOR DISORDERS; BLOOD; LIVER; URINE; BILE
Reynolds, P.C.; Van Meter, S. 1984 Journal of Analytical Toxicology 8:100

1-Azabicyclo(3.2.0)hept-2-ene-2-carboxylic acid, 6-(1-hydroxyethyl)-3-((2-((iminomethyl)amino)ethyl)thio)-7-oxo-, monohydrate, (5R-(5alpha,6alpha(R*)))-

76421-29-4

C13-H17-N3-O4-S.H2-O

Tissue	Cases Exposure Route	Range	Mean	General Information
11066 Blood, plasma	4 Injection	a) 26.8-44.3 ug/ml b) 10.1-15.1 ug/ml c) 2.4-6.3 ug/ml d) 20.6-44.0 ug/ml e) 11.6-21.7 ug/ml f) 3.9-13.5 ug/ml	a) 32.8+/-8.3 ug/ml b) 12.1+/-2.5 ug/ml c) 4.3+/-2.0 ug/ml d) 35.1+/-6.3 ug/ml e) 15.3+/-4.7 ug/ml f) 6.5+/-4.5 ug/ml	a) 0.33 hr b) 1.0 hr c) 2.0 hr d) 0.33 hr e) 1.0 hr f) 2.0 hr HPLC data, after 500 mg (20 uCi) C-14 labeled IV infusion over 20 min. d)-f) 500 mg cilastatin also given simultaneously. Radiometric levels, given in paper, were higher than HPLC levels. Healthy volunteers, 20-31 yr, 71-87 kg, 180-192 cm ht HPLC; Scintillation counting

BLOOD PLASMA; URINE; FECES; DELIBERATE EXPOSURE; ADULTS; DRUGS; DRUG INTERACTION; ANTIBIOTICS; METABOLISM

Norrby, S.R.; Rogers, J.D.; Farber, P.; Jones, K.H.; Zacchei, A.G.; Weidner, L.L.; Demetriades, J.L.; Gravalese, D.A.; Heick, J.Y.-K. 1984 Antimicrobial Agents and Chemotherapy 26(5):707-716

Tissue	Cases Exposure Route	Range	Mean	General Information
11067 Blood, plasma	6 Injection	a) 32.6-71.6 ug/ml b) 10.1-18.6 ug/ml c) 0.616-1.18 ug/ml d) 50.2-68.3 ug/ml e) 9.79-14.0 ug/ml f) 0.618-1.33 ug/ml g) 51.8-78.6 ug/ml h) 13.9-17.4 ug/ml i) 1.06-1.46 ug/ml	a) 52.1+/-13.82 ug/ml b) 11.7+/-1.20 ug/ml c) 0.784+/-0.266 ug/ml d) 57.4+/-6.06 ug/ml e) 12.5+/-1.55 ug/ml f) 1.02+/-0.240 ug/ml g) 66.9+/-9.21 ug/ml h) 15.4+/-1.36 ug/m' i) 1.28+/-0.146 ug/ml	a) 0 hr after 1st dose b) 1.5 hr after 1st dose c) 5.5 hr after 1st dose d) 0 hr after 17th dose e) 1.5 hr after 17th dose f) 5.5 hr after 17th dose g) 0 hr after 37th dose h) 1.5 hr after 37th dose i) 5.5 hr, 37th dose 1000 mg IV over 30 min, every 6 hr for 40 doses. Given with 1000 mg IV cilastatin. Healthy volunteers, 19-34 yr, 54.5-85.5 kg HPLC

BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; ANTIBIOTICS; DRUGS; DRUG INTERACTION

Drusano, G.L.; Standiford, H.C.; Bustamante, C.; Forrest, A.; Rivera, G.; Leslie, J.; Tatem, B.; Delaportas, D.; MacGregor, R.R.; Schimpff, S.C. 1984 Antimicrobial Agents and Chemotherapy 26(5):718-721

1-Azabicyclo(3.2.0)hept-2-ene-2-carboxylic acid, 6-(1-hydroxyethyl)-3-((2-((iminomethyl)amino)ethyl)thio)-7-oxo-, monohydrate, (5R-(5alpha,6alpha(R*)))-
74451-28-5
C13-H17-N3-O4-S.H2-O

Tissue	Cases Exposure Route	Range	Mean	General Information
11088 Urine	4 Injection	a) 9.6-88.1% b) 2.1-6.1% c) 0.5-1.5% d) 52.6-60.5% e) 8.3-12.6% f) 2.1-2.7% % of dose	a) 20.3+/-11.5% b) 3.3+/-2.0% c) 0.8+/-0.5% d) 56.3+/-3.1% e) 10.8+/-1.9% f) 2.3+/-0.3% % of dose	a) 0-2 hr b) 2-4 hr c) 4-6 hr d) 0-2 hr e) 2-4 hr f) 4-6 hr Collection periods after 500 mg (20 uCi) C-14 labeled IV infusion over 20 min. HPLC data. In d)-f), 500 mg cilastatin sodium given simultaneously. Radiometric data also given in paper. % recovery increased when given with cilastatin. Healthy volunteers, 30-51 yr, 71-87 kg, 180-192 cm ht HPLC; Scintillation counting
BLOOD PLASMA; URINE; FECES; DELIBERATE EXPOSURE; ADULTS; DRUGS; DRUG INTERACTION; ANTIBIOTICS; METABOLISM Norrby, S.R.; Rogers, J.D.; Ferber, F.; Jones, K.H.; Zacchei, A.G.; Weidner, L.L.; Demetriades, J.L.; Gravallese, D.A.; Hsieh, J.Y.-K. 1984 Antimicrobial Agents and Chemotherapy 26(5):707-714				

Tissue	Cases Exposure Route	Range	Mean	General Information
11060 Urine	6 Injection	a) 430-1581 ug/ml b) 282-902 ug/ml c) 75.2-513 ug/ml d) 258.0-443.4 mg e) 94.7-281.1 mg f) 18.2-55.9 mg	a) 886.8 ug/ml b) 562.8 ug/ml c) 175.8 ug/ml d) 361.8 mg e) 141.2 mg f) 27.9 mg	a) Level at 0-2 hr b) 2-4 hr c) 4-6 hr d) 0-2 hr, total amount excreted e) 2-4 hr f) 4-6 hr After 1000 mg IV over 30 min every 6 hr, 1st dose of 40. Given with 1000 mg IV cilastatin. Healthy volunteers, 19-34 yr, 54.5-85.5 kg HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; ANTIBIOTICS; DRUGS; DRUG INTERACTION Drusano, G.L.; Standiford, H.C.; Bustamante, C.; Forrest, A.; Rivera, G.; Leslie, J.; Tatem, B.; Delaportas, D.; MacGregor, R.R.; Schimpff, S.C. 1984 Antimicrobial Agents and Chemotherapy 26(5):718-721				

1-Butanone, 4-(1-pyrrolidinyl)-1-(2,4,6-trimethoxyphenyl)-
55837-26-7
C17-H25-N-O4

Tissue	Cases Exposure Route	Range	Mean	General Information
11060 Blood	1 Ingestion	Not applicable	65.4 mg/l	Ingested Loftyl drops containing 3 g bufomedil. Death 2.5 hr later. 19 yr old suicide victim Epileptic convulsions, pulmonary edema, ventricular fibrillation Cyanosis and congestion of internal organs Spectrophotometry; Chromatography

(next page)

1-Butanone, 4-(1-pyrrolidinyl)-1-(2,4,6-trimethoxyphenyl)-
55887-26-7
C17-H25-N-O4

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
11061 Kidney	1 Ingestion	Not applicable	27.5 mg/kg	Ingested Loftyl drops containing 3 g buflomedil. Death 2.5 hr later. 19 yr old suicide victim Epileptic convulsions, pulmonary edema, ventricular fibrillation Cyanosis and congestion of internal organs Spectrophotometry; Chromatography
11062 Liver	1 Ingestion	Not applicable	92 mg/kg	Ingested Loftyl drops containing 3 g buflomedil. Death 2.5 hr later. 19 yr old suicide victim Epileptic convulsions, pulmonary edema, ventricular fibrillation Cyanosis and congestion of internal organs Spectrophotometry; Chromatography
11063 Urine	1 Ingestion	Not applicable	106 mg/l	Ingested Loftyl drops containing 3 g buflomedil. Death 2.5 hr later. 19 yr old suicide victim Epileptic convulsions, pulmonary edema, ventricular fibrillation Cyanosis and congestion of internal organs Spectrophotometry; Chromatography

BLOOD; URINE; LIVER; KIDNEYS; DELIBERATE EXPOSURE; AUTOPSIES; ADOLESCENTS; DRUGS; VASODILATORS
Athanasolis, S.; Maravellas, C.; Michalodimitrakis, M.; Koutselinis, A. 1984 Clinical Chemistry 30(1):157

1-Oxa-4-aza-2,6-disilacyclohexane, 4-((3-methoxyphenyl)methyl)-2,2,6,6-tetramethyl-
72621-66-7
C14-H25-N-O2-Si2

Tissue	Cases Exposure Route	Range	Mean	General Information
11064 Blood	12 Ingestion	a) 0.16+/-0.11-0.51+/-0.06 ug/ml b) 0.21+/-0.13-1.26+/-0.14 ug/ml c) 1.2-4.7 ng/ml d) 2.2-14.8 ng/ml	a) Not given b) Not given c) Not given d) Not given	a) At 0.5 and 2 hr, 0.08 ug/ml at 12 hr, 50 mg dose, 6 cases, total radioactivity (drug plus metabolites) b) At 0.5 and 2 hr, 0.12 ug/ml at 12 hr, 100 mg dose, 6 cases, total radioactivity c) At 0.5 and 1 hr, 1.2 ng/ml at 4 hr, 50 mg dose, 6 cases d) At 0.5 and 2 hr, 1.7 ng/ml at 9 hr, 100 mg dose, 6 cases Ranges of means. Dose C-14 labeled. Healthy adults, 19-38 yr, 63-91 kg HPLC; Liquid scintillation
11065 Urine	12 Ingestion	a) 50.2+/-11.6-0.1+/-0.1% of dose b) 45.0+/-22.6-0.2+/-0.1% of dose	a) Not given b) Not given	a) 50 mg dose b) 100 mg dose At 0-8 hr and 96-120 hr. Dose C-14 labeled. Ranges of means. Healthy adults, 19-38 yr, 63-91 kg Liquid scintillation

URINE; FECES; BLOOD; DELIBERATE EXPOSURE; ADULTS; MUSCLE RELAXANTS; METABOLISM; DRUGS
Tse, F.L.S.; Jaffe, J.M.; Dain, J.G. 1984 Journal of Clinical Pharmacology 24:47-57

1-Pentanone, 1-(4-chlorophenyl)-5-methoxy-, O-(2-aminoethyl)oxime, (E)-
64709-19-4
C14-H21-Cl-N2-O2

Tissue	Cases Exposure Route	Range	Mean	General Information
11066 Blood, plasma	12 Ingestion	10-581 ng/ml	116 ng/ml	Peak after 85.5 or 71 mg as fumarate salt. 36-59 yr old patients (7 females, 5 males) treated for depression GC-EC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DEPRESSION; ANTIDEPRESSIVE AGENTS; DRUG THERAPY; DRUGS; BIOACCUMULATION Hurst, H.E.; Jones, D.R.; Wright, J.H.; Jarboe, C.H. 1983 Clinical Pharmacology and Therapeutics 34(2):266-272				

1-Penten-3-ol, 1-(1,3-benzodioxol-5-yl)-4,4-dimethyl-
69762-00-4
C14-H18-O3

Tissue	Cases Exposure Route	Range	Mean	General Information
11067 Blood, plasma	6 Ingestion	a) Not given b) Not given c) Not given	a) 0.92+/-0.21 mg/l b) 1.18+/-0.54 mg/l c) 5.62+/-3.03 mg/l	a) Steady-state after 600 mg/d b) Steady-state after 1200 mg/d c) Steady-state after 2400 mg/d Patients undergoing treatment for epilepsy, age 21-50 yr HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; NEUROLOGIC MANIFESTATIONS; ANTICONVULSANTS; DRUG INTERACTION; DRUG THERAPY; BIOACCUMULATION; DRUGS Levy, R.H.; Loiseau, P.; Guyot, M.; Bichaut, H.M.; Tor, J.; Moreland, T.A. 1984 Clinical Pharmacology and Therapeutics 36(5):661-669				

1-Penten-4-yn-3-ol, 1-chloro-3-ethyl-
112-18-8
C7-H9-Cl-O
MW 144.61, BP 178-174 C, also reported as 181 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11066 Blood	1	Not applicable	12 mg/L	Samples after death from multiple drug intoxication. Dose not state. Had taken 2 chlorpromazine tablets before going to bed. Additional drugs measured were amobarbital and ethchlorvynol. 32 yr old white male, 1.6 m, 111 kg, depressed but not suicidal. Past drug abuse. Used phentermine to lose wt GC
DELIBERATE EXPOSURE; AUTOPSIES; BLOOD; URINE; LIVER; KIDNEYS; DRUGS Levine, B.; Caplan, Y.H.; Dixon, A.M. 1984 Journal of Forensic Sciences 29(4):1242-1245				

1-Pentem-4-yn-3-ol, 1-chloro-3-ethyl-
118-18-8
C7-H9-Cl-O
MW 144.61, BP 178-174 C, also reported as 181 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11060 Blood	a) 11 b) 27 Ingestion	a) 8-46 mg/L b) 8-75 mg/L	a) 26 mg/L b) 21 mg/L	a) Ingested "pure" ethchlorvynol b) Ingested ethchlorvynol plus at least 1 more drug. Most commonly involved: glutethimide, codeine, phenobarbital, morphine amphetamines, benzodiazepines, ethanol, methaqualone, phenothiazines Dose known in 1 case (in a) - 11.25 g. Level was 46 mg/ml. 35 yr old males, 33 yr old females admitted to CA Medical Center 1/75-10/83 In patients taking "pure" drug: Depressed level of consciousness, dysarthria, mydriasis, nystagmus, coma areflexia, tachycardia, hypotension, ataxia, respiratory depression, seizure Spectrometry
BLOOD; DELIBERATE EXPOSURE; CALIFORNIA; CASE HISTORIES; SEDATIVES; DRUG INTERACTION; DRUGS Kelner, M.J.; Bailey, D.N. 1984 Clinical Toxicology 21(8):899-408				

Tissue	Cases Exposure Route	Range	Mean	General Information
11070 Blood	a) 11 b) 15 c) 8 d) 6 e) 5	a) 38.5-260 mg/l b) 5-66 mg/l c) 7.5-81 mg/l d) 80-260 mg/l e) 45-200 mg/l	a) 93.8 mg/l b) 20.4 mg/l c) 28.2+/-28.5 mg/l d) 97.6 mg/l e) 89.8 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths, 1979-1980 d) Single-drug deaths, without ethanol, 1975-1980 e) Single-drug deaths, with ethanol, 1975-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1988 Journal of Analytical Toxicology 7:225-230				

Tissue	Cases Exposure Route	Range	Mean	General Information
11071 Blood, plasma	15	a) 86.7-89.5 ug/ml b) 3.0 ug/ml	a) Not given b) 3.0 ug/ml	a) Analysed by colorimetry, and by GLC, one subject b) Same as a), different subject In vivo testing, for comparison with in vitro testing of various analytical methods. Drug taken as placidyl. Similar levels in whole blood. Patients GLC; GC; GC/MS; Colorimetry
BLOOD PLASMA; DELIBERATE EXPOSURE; SEDATIVES; DRUGS; MEASUREMENT METHODS Bridges, R.R.; Jennison, T.A. 1984 Journal of Analytical Toxicology 8:263-268				

1-Piperazinecarboxylic acid, 4-(4-amino-6,7,8-trimethoxy-2-quinazolinyl)-, 2-hydroxy-2-methylpropyl ester
88708-16-6
C20-H29-N5-O6

Tissue	Cases Exposure Route	Range	Mean	General Information
11073 Blood	5 Ingestion Injection	a) 0.3-1.3 ug/ml b) 8.0-1.0 ug/ml c) 0.4-0.8 ug/ml d) 17-0.2 ug/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 1-hydroxy metabolite, 40-700 min, peak (4.0 ug/ml) at 250 min after 200 mg oral b) 40-700 min, peak (14.0 ug/ml) at 75 min after 200 mg oral c) 1-hydroxy metabolite, 10-700 min, peak (2.0 ug/ml) at 200 min after 100 mg IV d) 10-700 min, peak (17 ug/ml) at 10 min after 100 mg IV. Healthy volunteers Single dose increased heart rate and reduced blood pressure HPLC

BLOOD; DELIBERATE EXPOSURE; ADULTS; SCOTLAND; CARDIOVASCULAR DISEASES; HYPOTENSION; ANTIHYPERTENSIVE AGENTS; DRUG THERAPY; BIOACCUMULATION; BLOOD PRESSURE; METABOLITES; DRUGS
Elliott, H.L.; Vincent, J.; Hughes, D.M.A.; Meredith, P.A.; Reid, J.L. 1984 Clinical Pharmacology and Therapeutics 35(2):156-160

1-Propanone, 1-(2-(2-hydroxy-3-(propylamino)propoxy)phenyl)-3-phenyl-
54063-53-5
C21-H27-N-O3

Tissue	Cases Exposure Route	Range	Mean	General Information
11078 Blood, plasma	a) 4 b) 4 c) 4 d) 8 e) 8 f) 6 g) 8 h) 8 i) 8 Ingestion Injection	a) 40.6-245.2 ng/ml b) 206.5-520.8 ng/ml c) 495.2-1837.5 ng/ml d) 128.1-886.4 ng/ml e) 14.4-426.7 ng/ml f) 7.7-52.1 ng/ml g) 800.4-1448.0 ng.h/ml h) 848.6-2645.6 ng.h/ml i) 918.2-4578 ng.h/ml	a) 130.2 ng/ml b) 364.0 ng/ml c) 827.0 ng/ml d) 331.1 ng/ml e) 150.4 ng/ml f) 26.2 ng/ml g) 1076.3 ng.h/ml h) 1288.9 ng.h/ml i) 1892.1 ng.h/ml	a) Peak, 150 mg solution b) Peak, 300 mg solution c) Peak, 450 mg solution d) Peak, 300 mg solution e) Peak, 300 mg tablet f) Peak, 150 mg tablet g) Area under curve (AUC), 70 mg IV h) AUC, 70 mg IV i) AUC, 70 mg IV after 150 mg b.i.d. for 12 d. Healthy volunteers, 19-47 yr old, wt 62-94 kg, ht 169-184 cm HPLC

BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; GERMANY; HEART DISEASES; ANTIARRHYTHMIC AGENTS; DRUGS; DRUG THERAPY; BIOACCUMULATION
Hollmann, M.; Brode, B.; Hotz, D.; Kaumeier, S.; Kehrhahn, O.H. 1988 Drug Research 38(1):768-770

Tissue	Cases Exposure Route	Range	Mean	General Information
11074 Blood, plasma	a) 1 b) 1 c) 7 Injection Ingestion	a) 800-30 ng/ml b) 600-10 ng/ml c) 800-960 ng/ml	a) Not applicable b) Not applicable c) Not applicable	a) 0-24 hr, rapid decline from 800-100 ng/ml in 2 hr, moderate decline to 24 hr, after 1 mg/kg IV b) 0-14 hr, rapid decline from 600-250 ng/ml in 1 hr, moderate decline to 14 hr, after 1 mg/kg IV c) 1-14 d, peak (1100 ng/ml) at 4 d after 800 mg t.i.d. Patients with chronic cardiac rhythm abnormalities, 39-73 yr old, wt 55-91 kg HPLC

BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; ANTIARRHYTHMIC AGENTS; DRUG THERAPY; DRUGS; BIOACCUMULATION
Connolly, S.; Lebsack, C.; Winkle, R.A.; Harrison, D.C.; Katee, R.E. 1984 Clinical Pharmacology and Therapeutics 36(2):163-168

1-Propanone, 1-(3-chlorophenyl)-2-((1,1-dimethylethyl)amino)-, (+-)-
84911-55-2
C13-H18-Cl-N-O

Tissue	Cases Exposure Route	Range	Mean	General Information
11075 Blood, plasma	8	a) 33-68 ng/ml b) 1006-3111 ng/ml c) 108-542 ng/ml d) 458-2226 ng/ml	a) Not given b) Not given c) Not given d) Not given	a) Parent drug b) Metabolite, 3'-chloro-2-(2-hydroxy-1,1-dimethylethylamino)propiophenone hydrochloride c) (+)(R°,S°)-2-(tert-butylamino)-1-(3-chlorophenyl)propanol d) (R°,R°)-2-(tert-butylamino)-1-(3-chlorophenyl)propanol steady-state after 100-450 mg/d. Patients HPLC

BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DEPRESSION; ANTIDEPRESSIVE AGENTS; DRUGS; DRUG THERAPY; BIOACCUMULATION
Cooper, T.B.; Suckow, R.F.; Glassman, A. 1984 Journal of Pharmaceutical Sciences 73(8):1104-1107

1,1-Ethenediamine, N-(2-(((5-((dimethylamino)methyl)-2-furanyl)methyl)thio)ethyl)-N'-methyl-2-nitro -
66857-35-5
C13-H22-N4-O3-S
MW 314.4

Tissue	Cases Exposure Route	Range	Mean	General Information
11076 Blood	1 Ingestion Injection	a) 600-10 ug/ml b) 50-20 ug/ml c) 2000-50 ug/ml d) 200-25 ug/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 0-8 hr, peak (600 ug/ml) at 5 min, trough (75 ug/ml) at 1.5 hr, peak (100 ug/ml) at 2 hr after 20 mg IV b) 0-8 hr, peak (100 ug/ml) at 2 hr, trough (75 ug/ml) at 3 hr, peak (90 ug/ml) at 3.5 hr after 20 mg oral c) 0-8 hr, peak (2000 ug/ml) at 5 min, trough (150 ug/ml) at 4 hr, peak (400 ug/ml) at 4.5 hr after 80 mg IV d) 0-8 hr, peak (250 ug/ml) at 0.5 hr, trough (100 ug/ml) at 1.5 hr, peak (300 ug/ml) at 2 hr after 80 mg oral Secondary peaks represent releases from body depot. Volunteer

BLOOD; DELIBERATE EXPOSURE; SOUTH AFRICA; DRUG THERAPY; DRUGS; BIOACCUMULATION
Miller, J. 1984 Journal of Pharmaceutical Sciences 73(10):1376-1379

Tissue	Cases Exposure Route	Range	Mean	General Information
11077 Blood, plasma	a) 9 b) 7 Ingestion	a) 404-1225 ng/ml b) 851-984 ng/ml	a) 680.1+/-248.8 ng/ml b) 782.1+/-239.1 ng/ml	a) Patients with moderate renal insufficiency (>15 ml/min/1.73 sq m inulin clearance), peak 4.11+/-1.17 hr after 150 mg b) Patients with severe renal insufficiency (<15 ml/min/1.73 sq m inulin clearance), peak 3.64+/-1.10 hr after 150 mg. Patients, wt 46-95 kg (mean 65+/-13 kg), ht 1.53-1.74 m (mean 1.64+/-0.06 m), 9 males, 7 females, 27-74 yr old (mean 64+/-14 yr) HPLC

BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; FRANCE; GASTROINTESTINAL DISEASES; KIDNEY DISEASES; ANTACIDS; DRUG THERAPY; DRUGS; BIOACCUMULATION
Zech, P.Y.; Nguyen P.C.; Poast, N.; Labeeuw, M.; Hadj-Aissa, A. 1983 Clinical Pharmacology and Therapeutics 34(5):667-672

1,1-Ethenediamine, N-(2-(((5-((dimethylamino)methyl)-2-furanyl)methyl)thio)ethyl)-N'-methyl-2-nitro -
66357-35-5
C13-H22-N4-O3-S
MW 314.4

Tissue	Cases Exposure Route	Range	Mean	General Information
11078 Blood, serum	12 Injection Ingestion	a) 4000-50 ng/ml b) 200-20 ng/ml	a) Not given b) Not given	a) Initially and 7 hr, IV b) 3 and 12 hr, oral dose: 100 mg. Estimated from graph Healthy 19-32 yr olds, wt 64-84 kg RIA
ADULTS; BLOOD SERUM; URINE; METABOLISM; METABOLITES; DRUGS Garg, D.C.; Weidler, D.J.; Eshelman, F.N. 1988 Clinical Pharmacology and Therapeutics 38(4):445-452				

Tissue	Cases Exposure Route	Range	Mean	General Information
11079 Urine	a) 9 b) 7 Ingestion	a) 12.7-40.7 mg b) 1.1-17.9 mg	a) 26.8+/-9.3 mg b) 9.8+/-5.5 mg	a) Patients with moderate renal insufficiency (>15 ml/min/1.73 sq m inulin clearance) b) Patients with severe renal insufficiency (<15 ml/min/1.73 sq m inulin clearance) Unchanged parent drug recovered in 24 hr. Patients, wt 46-95 kg (mean 65+/-13 kg), ht 1.53-1.74 m (mean 1.64+/-0.06 m), 9 males, 7 females, 27-74 yr old (mean 64+/-14 yr) HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; FRANCE; GASTROINTESTINAL DISEASES; KIDNEY DISEASES; ANTACIDS; DRUG THERAPY; DRUGS; BIOACCUMULATION Zech, P.Y.; Nguyen P.C.; Poset, N.; Lebecuw, M.; Hadj-Aissa, A. 1988 Clinical Pharmacology and Therapeutics 34(5):667-672				

Tissue	Cases Exposure Route	Range	Mean	General Information
11080 Urine	12 Injection Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 60.4+/-6.1% b) 26.7+/-7.2% c) 5.5% d) 1.6% e) 2.0% f) 4.0% g) 1.0% h) 1.1% % of dose	a) Unchanged drug after IV b) Unchanged drug after oral c) N-oxide- after IV d) S-oxide- after IV e) N-desmethyl- after IV f) N-oxide- after oral g) S-oxide- after oral h) N-desmethyl- after oral Drug, metabolites after 100 mg doses. 24 hr excretions. Estimated from graph Healthy 19-32 yr olds, wt 64-84 kg HPLC
ADULTS; BLOOD SERUM; URINE; METABOLISM; METABOLITES; DRUGS Garg, D.C.; Weidler, D.J.; Eshelman, F.N. 1988 Clinical Pharmacology and Therapeutics 38(4):445-452				

1,2-Propanediol, 3-(2-nitroimidasol-1-yl)- (8 CI); 1,2-Propanediol, 3-(2-nitro-1H-imidasol-1-yl- (9 CI)
18551-92-5
C6-H9-N3-O4
MW 187.18

Tissue	Cases Exposure Route	Range	Mean	General Information
11081 Blood, plasma	2 Injection	Not given	51.5+/-6.3 ug/ml	3 hr after 3.7 +or- 0.1 g IP, with abdominal irradiation Patients with advanced ovarian carcinoma Nausea, vomiting, diarrhea. HPLC
11082 Peritoneal fluid	2 Injection	Not given	566+/-61 ug/ml	3 hr after 3.7 +or- 0.1 g IP, with abdominal irradiation Patients with advanced ovarian carcinoma Nausea, vomiting, diarrhea. HPLC
ADULTS; CARCINOMAS; BLOOD PLASMA; PERITONEAL FLUID; DRUGS; CHEMOTHERAPY; NEOPLASMS				
Gianni, L.; Jenkins, J.F.; Greene, R.F.; Lichter, A.S.; Myers, C.E.; Collins, J.M. 1988 Cancer Research 48:913-916				

1,3-Benzenedicarboxamide, 5-(acetyl(2,3-dihydroxypropyl)amino)-N,N'-bis(2,3-dihydroxypropyl)-2,4,6-triiodo -
66108-95-0
C19-H26-I3-N3-O9

Tissue	Cases Exposure Route	Range	Mean	General Information
11083 Blood, plasma	2 Injection	a) Not given b) Not given	a) 2X10(E+4)-6.5X10(E-1) ug/ml b) 7X10(E+3)-6X10(E-1) ug/ml	a) 0 and 72 hr after 146,000 mg, 1 case b) 0 and 48 hr after 80,600 mg, 1 case Estimated from graph. New ionic radiographic contrast agent. 18-50 yr old healthy volunteers HPLC
11084 Urine	16 Injection	a) 79.2-90.6% b) 86.8-101.0% c) 87.9-96.9% d) 86.1-101% % of dose	a) 86.2+/-4.88% b) 93.8+/-7.88% c) 92.7+/-3.06% d) 96.8+/-7.15% % of dose.	a) 62.7-92.5 g, equivalent to 500 mg Iodine/kg b) 96.8-146 g, 750 mg Iodine/kg c) 126-186 g, 1000 Iodine/kg d) 206-248 g, 1500 mg Iodine/kg Cumulative excretion, 0-96 hr after dose. New ionic radiographic contrast agent. 18-50 yr old healthy volunteers HPLC
URINE; BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS				
Edelson, J.; Shaw, D.; Palace, G. 1984 Journal of Pharmaceutical Sciences 73(7):993-996				

1,3-Dihydro-4-methyl-5-[4-(methylthio)-bensoyl]-2H-imidasol-2-one (No postings in CHEMLINE).

Tissue	Cases Exposure Route	Range	Mean	General Information
11085 Blood, plasma	6 Ingestion Injection	a) 17.17+/-11.88-0.05+/-0.07 nmol/ml b) 0.41+/-0.42-0.08+/-0.10 nmol/ml c) 2.57+/-0.88-0.16+/-0.12 nmol/ml d) 0.57+/-0.88-0.54+/-0.15 nmol/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 0-240 min, peak (17.17+/-11.88 nmol/ml) immediately after 1 mg/kg IV b) 0-360 min, peak (4.99+/-3.77 nmol/ml) 10 min after 3 mg/kg oral c) Sulphoxide metabolite, 0-420 min, peak (3.82+/-0.76 nmol/ml) 10 min after 1 mg/kg IV d) Sulphoxide metabolite, 0-480 min, peak (10.43+/-3.57 nmol/ml) 30 min after 3 mg/kg oral. Healthy volunteers, 19-28 yr old (mean 25.2 yr), wt 60-82 kg (mean 71.2 kg) HPLC
11086 Urine	6 Ingestion Injection	a) 0.14-0.45% b) 0.08-0.20% c) 68.9-81.1% d) 43.7-71.5%	a) 0.26+/-0.10% b) 0.15+/-0.04% c) 75.7+/-5.7% d) 64.3+/-10.4%	a) 1 mg/kg IV b) 3 mg/kg oral c) Sulphoxide metabolite, 1 mg/kg IV d) Sulphoxide metabolite, 3 mg/kg oral % dose recovered in 24 hr. Healthy volunteers, 19-28 yr old (mean 25.2 yr), wt 60-82 kg (mean 71.2 kg) HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; GERMANY; ADULTS; HEART DISEASES; ANTIARRHYTHMIC AGENTS; DRUG THERAPY; DRUGS; BIOACCUMULATION; METABOLITES Alken, R.F.; Bels, G.G.; Haegele, K.D.; Meinicke, T.; Schechter, P.J. 1984 Clinical Pharmacology and Therapeutics 36(2):209-216				

1,3-Propanediol, 2-methyl-2-propyl-, dicarbamate
57-53-4
C9-H18-N2-O4
MW 218.25, MP 104-106 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11087 Blood	1 Ingestion	Not applicable	0.2 mg/L	Postmortem levels after taking >12 Darvocet-N tablets 19 yr old male Caucasian, wt 77 kg, ht 1.85 m Unconsciousness, probably at >2 hr, <7 hr, death <14 hr, possibly <7 hr after ingestion Colorimetry
DELIBERATE EXPOSURE; DRUGS; SUICIDE; AUTOPSIES; BLOOD; URINE; ANALGESICS Eberhardt, R.D.; Cash, D.K. 1984 Journal of Analytical Toxicology 8:246-247				

Tissue	Cases Exposure Route	Range	Mean	General Information
11088 Blood	a) 9 b) 1 Ingestion	a) 0.9-17.7 mg/dL b) Not applicable	a) Not given b) 20.5 mg/dL	a) Non-fatal suicides at admission b) Fatal suicides, postmortem No other drugs involved. 20-94 yr olds attempting suicides 1/75-5/83 University of California Medical Center, San Diego Coma, ataxia, hallucinations, hypotension, nystagmus, miosis, respiratory depression and tachycardia in some GLC; Spectrophotometry
BLOOD; DELIBERATE EXPOSURE; ADULTS; SUICIDE; DRUG ABUSE; DRUGS; HYPNOTICS; SEDATIVES; FORENSIC MEDICINE Bailey, D.N.; Shaw, R.F. 1983 Journal of Toxicology-Clinical Toxicology 20(2):133-145				

1,2-Propanediol, 2-methyl-2-propyl-, dicarbamate
57-53-4
C9-H18-N2-O4
MW 218.25, MP 104-106 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11060 Blood	a) 1 b) 4 c) 6	a) Not applicable b) 12-160 mg/l c) 21-370 mg/l	a) 46 mg/l b) 59.2 mg/l c) 113+/-132 mg/l	a) Single-drug death, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths, 1979-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.B.; Crooks, C.R. 1985 Journal of Analytical Toxicology 7:225-230				

1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-, stereoisomer
59653-75-5
C12-H15-N3-O6

Tissue	Cases Exposure Route	Range	Mean	General Information
11060 Blood, plasma	a) 6 b) 6 c) 6 Injection	a) 0.13-0.45 ug/ml b) 0.44-4.4 ug/ml c) 2.7-10.3 ug/ml	a) 0.33 ug/ml b) 2.2 ug/ml c) 6.4 ug/ml	a) Dose, 12.5 mg/min, 1500 mg/sq m b) Dose, 25 mg/min, 1500 mg/sq m c) Dose, 45 mg/min, 1000 mg/sq m Mean plateaus, rapidly achieved and maintained. Rapid drop at end of infusion. Not detectable by 20 min after 5-10 min infusion. Cancer patients HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ANTITUMOR AGENTS; BIOLOGICAL MONITORING; NEOPLASMS; DRUGS; DRUG THERAPY Ames, M.M.; Kovach, J.S.; Rubin, J. 1984 Cancer Research 44:4151-4156				

1,4-Butanediol, dimethanesulfonate
55-98-1
C6-H14-O6-S2
MW 246.31, MP 114-116 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11091 Blood, plasma	a) 5 b) 5 c) 5 Ingestion	a) 24-36 ng/ml b) 36-69 ng/ml c) 52-130 ng/ml	a) 28+/-5 ng/ml b) 65+/-27 ng/ml c) 88+/-31 ng/ml	a) Peak, 2 mg tablet b) Peak, 4 mg tablet c) Peak, 6 mg tablet. Patients with chronic myelocytic leukemia, 3 males, 2 females, 32-58 yr old GC

(next page)

1,4-Butanediol, dimethanesulfonate
55-98-1
C6-H14-O6-S2
MW 246.31, MP 114-118 C

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
11092 Urine	a) 5 b) 5 c) 5 Ingestion	a) 0.05-3.0% b) 0.5-1.2% c) .04-1.5%	a) 1.2% b) 0.8% c) 0.6%	a) After 2 mg tablet b) After 4 mg tablet c) After 6 mg tablet % dose excreted in 24 hr. Patients with chronic myelocytic leukemia, 3 males, 2 females, 32-53 yr old GC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; SWEDEN; ADULTS; LEUKEMIA; ANTITUMOR AGENTS; DRUG THERAPY; DRUGS; BIOACCUMULATION; METABOLITES; CHEMOTHERAPY Ehrsson, H.; Hassan, M.; Ehrnebo, M.; Beran, M. 1983 Clinical Pharmacology and Therapeutics 34(1):86-89				

1,5-Benzothiazepin-4(5H)-one, 3-(acetyloxy)-5-(2-(dimethylamino)ethyl)-2,3-dihydro-2-(4-methoxyphenyl)-, cis-(+)-
42399-41-7
C22-H26-N2-O4-S
MW 414.52

Tissue	Cases Exposure Route	Range	Mean	General Information
11093 Blood, plasma	a) 1 b) 1 Injection	a) 344-12 ng/ml b) 289-5 ng/ml	a) Not given b) Not given	a) Patient 1 b) Patient 2 5 minutes and 8 hr after 20 mg IV bolus. At 1 hr a) 40 and b) 50 ng/ml. Improved assay. Some values estimated from figure. Patients with unstable angina GC-EC
BLOOD PLASMA; DELIBERATE EXPOSURE; HEART DISEASES; DRUG THERAPY; DRUGS; MEASUREMENT METHODS; METABOLITES Closel, J.P.; Caille, G.; Taeymans, Y.; Theroux, P.; Biron, P.; Besner, J.G. 1984 Journal of Pharmaceutical Sciences 73(2):207-209				

Tissue	Cases Exposure Route	Range	Mean	General Information
11094 Blood, plasma	12 Ingestion Injection	a) 45+/-52-2.8+/-1.5 ng/ml b) 24+/-9-6.5+/-1.5 ng/ml	a) Not applicable b) Not applicable	a) 10 min-12 hr, peak (76+/-27 ng/ml) at 30 min after 15 mg IV b) 1-12 hr, peak (45.2+/-10.3 ng/ml) at 2 hr after 60 mg oral. Healthy volunteers GC
BLOOD PLASMA; DELIBERATE EXPOSURE; FRANCE; ADULTS; HEART DISEASES; CARDIOVASCULAR DISEASES; ANALGESICS; VASODILATORS; DRUG THERAPY; DRUGS; BIOACCUMULATION Rodger, H.S.D.; Remones, G.; Thenot, J.P.; London, D.R.; Morselli, P.L. 1983 European Journal of Clinical Pharmacology 24:349-352				

1,5-Benzothiazepin-4(5H)-one, 3-(acetyloxy)-5-(2-(dimethylamino)ethyl)-2,3-dihydro-2-(4-methoxyphenyl)-, cis-(+)-
42399-41-7
C22-H26-N2-O4-S
MW 414.52

Tissue	Cases Exposure Route	Range	Mean	General Information
11095 Blood, plasma	6 Ingestion	a) 30-21 ng/ml b) 30-21 ng/ml	a) Not applicable b) Not applicable	a) 0-32 hr, peak (90 ng/ml) at 3 hr after 90 mg b) 0-32 hr, peak (70 ng/ml) at 3 hr after 90 mg and 0.2 mg b.i.d. beta-acetyldigoxin. Healthy volunteers, mean age 24.5+/-2.6 yr, wt 71.7+/-9.5 kg, ht 179.1+/-8.5 cm. RIA

BLOOD PLASMA; DELIBERATE EXPOSURE; AUSTRIA; ADULTS; HEART DISEASES; HYPERTENSION; CARDIOVASCULAR DISEASES; ANTIARRHYTHMIC AGENTS; BETA BLOCKER; DRUG INTERACTION; DRUG THERAPY; DRUGS; BIOACCUMULATION

Ramsis, H.; Magometschnigg, D.; Ganzinger, U. 1984 Clinical Pharmacology and Therapeutics 36(2):183-189

Tissue	Cases Exposure Route	Range	Mean	General Information
11096 Blood, serum	8 Ingestion	44-144 ng/ml	Not given	After 90 mg dose, followed by 60 mg/6 hr for 48 hr. Study assessed influence on homeostasis, found slightly elevated levels of prostacyclin metabolite after dosage. Healthy volunteers HPLC

BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; CARDIOVASCULAR DISEASES; HEART DISEASES; ANTIARRHYTHMIC AGENTS; DRUG INTERACTION; METABOLITES; BIOACCUMULATION; DRUGS

Cremer, K.F.; Pieper, J.A.; Joyal, M.; Mehta, J. 1984 Clinical Pharmacology and Therapeutics 36(5):641-644

Tissue	Cases Exposure Route	Range	Mean	General Information
11097 Urine	2 Ingestion	a) 1.5 mg b) 25 mg c) 1 mg d) 25 mg e) 3.5 mg f) 75 mg	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) Patient 1, 8 hr after single 120 mg dose b) Patient 1, major metabolite c) Patient 2, 8 hr after first of 3 120-mg doses/d d) Patients 2, major metabolite e) Patient 2, 22 hr after 1st dose f) Patient 2, major metabolite Cumulative amounts excreted, 5 other metabolite levels given. Estimated from graph. Patients treated with drug for unstable angina HPLC

URINE; DELIBERATE EXPOSURE; DRUGS; MEASUREMENT METHODS; METABOLITES

Closel, J.P.; Caille, G.; Taeymans, Y.; Theroux, P.; Biron, P.; Trudel, F. 1984H Journal of Pharmaceutical Sciences 73(6):771-773

1,8-Naphthyridine-3-carboxylic acid, 1-ethyl-6-fluoro-1,4-dihydro-4-oxo-7-(1-piperazinyl)-
74011-58-8
C18-H17-F-N4-O3

Tissue	Cases Exposure Route	Range	Mean	General Information
11008 Blister fluid	6 Ingestion	<0.1-1.2+/-0.3 ug/ml	Not given	0.5 and 12 hr after single 600 mg dose. Peak 2.6+/-0.6 ug/ml at 4 hr. Blister induced with cantharidee-impregnated plasters. 10 hr fast prior to dose. 22-42 yr old (mean 29.5 yr) healthy volunteers Plate diffusion
11009 Blood, serum	6 Ingestion	0.07+/-0.12-0.2+/-0.1 ug/ml	Not given	0.25 and 24 hr after single 600 mg dose. Peak 2.0+/-0.7 ug/ml at 2 hr. 10 hr fast prior to dose. 22-42 yr old (mean 29.5 yr) healthy volunteers Plate diffusion
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; ANTIBIOTICS; DRUGS; BLISTER FLUID Wise, R.; Lockley, R.; Dent, J.; Webberly, M. 1984 Antimicrobial Agents and Chemotherapy 26(1):17-19				

1alphaH,5alphaH-Tropane-2beta-carboxylic acid, 3beta-hydroxy-, benzoate (ester) (8 CI); 8-Azabicyclo(3.2.1)octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-, (1R-(exo,exo))- (9 CI)
519-09-5
C16-H19-N-O4
MW 289.34, MP Tetrahydrate 86-92 C (decomp 195 C, dry)

Tissue	Cases Exposure Route	Range	Mean	General Information
11100 Urine	2 Inhalation	1.3-45.0 ug/ml	32.0 ug/ml	Peak excretion in 8 hrs. Identified as major cocaine metabolite. Initial dose 96 mg. Drug screen use. Young adults with history of cocaine use ELISA
URINE; DELIBERATE EXPOSURE; ILLINOIS; ADULTS; BEHAVIOR DISORDERS; DRUG ABUSE; DRUGS; NARCOTICS; PSYCHOTROPIC DRUGS; STIMULANTS; MEASUREMENT METHODS; BIOINDICATORS; BIOLOGICAL MONITORING; METABOLITES Ambre, J.; Fischman, M.; Ruo, T.-I. 1984 Journal of Analytical Toxicology 8:25-26				

1alphaH,5alphaH-Tropane-2beta-carboxylic acid, 3beta-hydroxy-, methyl ester (8 CI); 8-Azabicyclo(3.2.1)octane-2-carboxylic acid, 3-hydroxy-8-methyl-, methyl ester, (1R-(exo,exo))- (9 CI)
7148-09-1
C10-H17-N-O3

Tissue	Cases Exposure Route	Range	Mean	General Information
11101 Urine	2 Inhalation	0.1-36.2 ug/ml	32.2 ug/ml	Peak excretion in 8 hrs. Identified as major cocaine metabolite. Initial dose 96 mg. Drug screen use. Young adults with history of cocaine use GC; MS
URINE; DELIBERATE EXPOSURE; ILLINOIS; ADULTS; BEHAVIOR DISORDERS; DRUG ABUSE; DRUGS; NARCOTICS; PSYCHOTROPIC DRUGS; STIMULANTS; MEASUREMENT METHODS; BIOINDICATORS; BIOLOGICAL MONITORING; METABOLITES Ambre, J.; Fischman, M.; Ruo, T.-I. 1984 Journal of Analytical Toxicology 8:25-26				

1alphaH,5alphaH-Tropane-2beta-carboxylic acid, 3beta-hydroxy-, methyl ester, benzoate (ester) (8 CI) 8-Azabicyclo(3.2.1)octane-2-carboxylic acid, 3-(benzoyloxy)-8-methyl-, methyl ester, (1R-(exo,exo))- (9 CI)
50-36-2
C17-H21-N-O4
MW 303.36, MP 98 C, BP 167-168 C at 0.1 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
11102 Blood	240			Review. Autopsy findings related to recreational drug use, Dade County, FL. Data on epidemiology, pathology, toxicology in cocaine-related overdose deaths, 1978-1982.
BLOOD; DELIBERATE EXPOSURE; AUTOPSIES; DRUG ABUSE; DRUGS; NARCOTICS; REVIEW; HEALTH HAZARDS Mittleman, R.E.; Wetli, C.V. 1984 Journal of the American Medical Association 252(14):1889-1893				

Tissue	Cases Exposure Route	Range	Mean	General Information
11108 Blood	a) 8 b) 4 c) 1	a) 0.6-11.8 mg/l b) 0.07-1.9 mg/l c) Not applicable	a) 5.1 mg/l b) 0.94 mg/l c) 0.5 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related death, 1979-1980. Autopsy, Maryland State Medical Examiners office. Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Tissue	Cases Exposure Route	Range	Mean	General Information
11104 Blood, plasma	a) 1 b) 1 Inhalation Injection	a) 10 ng/ml-6 ng/ml b) 300 ng/ml-7 ng/ml	a) Not applicable b) Not applicable	a) 0-6 hr, inhalation peak (100 ng/ml) at 1 hr. Dose 2 mg/kg b) 0-6 hr, IV peak (350 ng/ml) at 10 min. Dose 0.4 mg/kg Rapid, sensitive assay. Volunteers GC
BLOOD PLASMA; DELIBERATE EXPOSURE; DRUG ABUSE; MEASUREMENT METHODS; BIOACCUMULATION Jacob, P.; Elias-Baker, B.A.; Jones, R.T.; Benowitz, N.L. 1984 Journal of Chromatography 306:173-81				

Tissue	Cases Exposure Route	Range	Mean	General Information
11105 Urine	2 Inhalation	0.2-11.3 ug/ml	6.6 ug/ml	Peak excretion in 8 hrs. Initial dose 96 mg, metabolized to ecgonine methyl ester and benzoylecgonine. Young adults with history of cocaine use GC; MS
URINE; DELIBERATE EXPOSURE; ILLINOIS; ADULTS; BEHAVIOR DISORDERS; DRUG ABUSE; DRUGS; NARCOTICS; PSYCHOTROPIC DRUGS; STIMULANTS; MEASUREMENT METHODS; BIOINDICATORS; BIOLOGICAL MONITORING; METABOLITES Ambre, J.; Fischman, M.; Ruo, T.-I. 1984 Journal of Analytical Toxicology 8:28-35				

1alphaH,5alphaH-Tropane, 3alpha-(diphenylmethoxy)-, methanesulfonate (8 CI); 8-Azabicyclo(3.2.1)octane, 3-(diphenylmethoxy)-8-methyl-, endo-, methanesulfonate (9 CI)
132-17-2
C21-H25-N-O.C-H4-O3-S
MW 403.53, MP 143 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11106 Blood	2	0.8-1.1 mg/l	0.7 mg/l	Non-drug related deaths, 1975-1980. Autopsy, Maryland State Medical Examiners office. Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooke, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

1H-Bens(e)indolium, 2-(7-(1,1-dimethyl-3-(4-sulfobutyl)bens(e)indolin-2-ylidene)-1,3,5-heptatrienyl) -1,1-dimethyl-3-(4-sulfobutyl)-, hydroxide, inner salt, sodium salt (8 CI); 1H-Bens(e)indolium; 2-(7-(1,3-dihydro-1,1-dimethyl-3-(4-sulfobutyl)-2H-bens(e)indol-2-ylidene)-1,3,5 -heptatrienyl)-1,1-dimethyl-3-(4-sulfobutyl)-, hydroxide, inner salt, sodium salt (9 CI)
3599-32-4
C43-H48-N2-O6-S2.Na
MW 775.07

Tissue	Cases Exposure Route	Range	Mean	General Information
11107 Blood	11 Ingestion Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 41.4+/-14.1 ml/kg b) 38.8+/-8.88 ml/kg c) 41.8+/-10.6 ml/kg d) 26.3+/-10.8 ml/kg e) 29.8+/-8.21 ml/kg f) 30.2+/-8.97 ml/kg Volume of distribution	a) 150 mg ranitidine 2X/d for 48 hr prior to dose. Measured spectrophotometrically b) 300 mg cimetidine 4X/d for 48 hr prior to dose c) No drug prior to dose d) 150 mg ranitidine 2X/d for 48 hr prior to dose. Measured by HPLC e) 300 mg cimetidine 4X/d for 48 hr prior to dose f) No drug prior to dose 0.5 mg/kg indocyanine green 90 min after last dose of ranitidine or cimetidine. Significant difference between methods ($p<0.001$) but not between treatments ($p>0.10$). HPLC gives monoexponential and spectrophotometry gives biexponential curve. 21-33 yr old (mean 26 yr) healthy volunteers HPLC; Spectrophotometry
BLOOD; DELIBERATE EXPOSURE; ADULTS; DRUGS; MEASUREMENT METHODS; COMPARATIVE EVALUATIONS Dean, K.H.; Powell, J.R.; Rogers, J.F.; Piscitelle, J.R. 1984 Journal of Clinical Pharmacology 24:360-370				

1H-Imidazo(1,2-a)(1,4)benzodiazepin-1-one, 6-(2-chlorophenyl)-2,4-dihydro-2-((4-methyl-1-piperazinyl)methylene)-8-nitro- (9 CI)
61197-73-7
C22-H21-Cl-N6-O3

Tissue	Cases Exposure Route	Range	Mean	General Information
11108 Blood, plasma	3 Ingestion	a) 1.0-1.0 ng equiv/ml b) 6-7 ng equiv/ml	a) Not applicable b) Not applicable	a) Parent, 0.5-8 hr, peak (5 ng equiv/ml) 1 hr after 1 mg b) Total radioactivity, 0-8 hr, peak (7 ng equiv/ml) 1-8 hr after 1 mg. Healthy volunteers, 42-60 yr old, wt 61-81 kg HPLC/GLC

(next page)

1H-Imidazo(1,2-a)(1,4)benzodiazepin-1-one, 6-(2-chlorophenyl)-3,4-dihydro-2-((4-methyl-1-piperazinyl)methylene)-8-nitro- (9 CI)
61197-73-7
C23-H21-Cl-N6-O3

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
11100 Urine	8 Ingestion	Not given	58.8+/-0.8%	% dose recovered in 14 d after 1 mg. 52.8+/-2.8% excreted in feces. Healthy volunteers, 42-60 yr old, wt 61-81 kg HPLC/GLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; TRANQUILIZERS; BENZODIAZEPINES; DRUGS; DRUG THERAPY; BIOACCUMULATION; RADIONUCLIDES; METABOLITES Illing, H.P.A.; Inge, R.M.J.; Johnson, K.I.; Premsen, J.M. 1983 Xenobiotica 13(7):429-440				

1H-Imidazole-4-carboxamide, 5-hydroxy-1-beta-D-ribofuranosyl- (9 CI)
60024-49-7
C9-H13-N3-O6

Tissue	Cases Exposure Route	Range	Mean	General Information
11110 Blood, serum	26 Ingestion	a) Not given b) 4.8-7 ug/ml c) Not given d) Not given	a) 0.852+/-0.062 b) Not applicable c) 1.09+/-0.81 d) 1.08+/-0.28 (ug/ml)/(mg/kg)	a) Peak 2.39+/-0.18 hr after 50-350 mg, 26 cases b) 1-24 hr, peak (8 ug/ml) 4 hr after 50 mg, anuric subject c) Peak 2.16+/-0.32 hr after 100 mg at 7:00 a.m., 3 cases d) Peak 2.35+/-0.25 hr after 100 mg at 7:00 p.m., 8 cases. Patients at Renal Transplantation Center, Hyogo, Japan, and Osaka University Hospital, Osaka, Japan, 13 males, 15 females, 15-50 yr old, wt 51.5-64.5 kg HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; JAPAN; KIDNEY DISEASES; DRUGS; DRUG THERAPY; SURGERY; BIOACCUMULATION Tahoda, K.; Asada, S.; Ichihara, Y.; Sonoda, T.; Tabuhara, S.; Nagano, S.; Fukunishi, T. 1983 European Journal of Clinical Pharmacology 24:457-461				

1H-Imidazole, 1-((1,1'-biphenyl)-4-ylphenylmethyl)-
60630-96-8
C22-H18-N2

Tissue	Cases Exposure Route	Range	Mean	General Information
11111 Blood, serum	a) 5 b) 1 c) 4 d) 1 Dermal	a) Not given b) Not given c) Not given d) Not given	a) 0.00157 ug/ml b) 0.00798 ug/ml c) 0.00101 ug/ml d) 0.00840 ug/ml	a) Peak after 0.32+/-0.05 mg/kg as 1% solution applied to healthy ventral skin b) Peak after 0.25 mg/kg as 1% solution applied to inflamed dorsal skin c) Peak after 0.23+/-0.04 mg/kg as 1% cream applied to healthy ventral skin d) Peak after 0.20 mg/kg as 1% cream applied to inflamed femoral skin. Volunteers with healthy or inflamed skin, 5 males, 6 females, 40-60 yr old Scintillation counting

(next page)

1H-Imidazole, 1-((1,1'-biphenyl)-4-ylphenylmethyl)-
60628-96-8
C22-H18-N2

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
11113 Skin	8 Dermal	a) 200-1000 ug/cc b) Not given c) Not given d) Not given	a) Not given b) 150 ug/cc c) 20 ug/cc d) 9 ug/cc	a) Stratum corneum b) Upper cellular layers of epidermis c) Stratum basale d) At 100-150 um depth 1% solution (1.5 mg/sq cm) applied for 12 hr. Healthy volunteers, 35 yr old Autoradiogram
11118 Urine	a) 5 b) 1 c) 4 d) 1 e) 6 Dermal Injection	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 0.404+/-0.130% b) 1.73% c) 0.391+/-0.100% d) 1.01% e) 44.6+/-3.4%	a) 1% solution (0.22+/-0.05 mg/kg) applied to healthy skin b) 1% solution (0.33 mg/kg) applied to inflamed skin c) 1% cream (0.23+/-0.04 mg/kg) applied to healthy skin d) 1% cream (0.33 mg/kg) applied to inflamed skin e) 0.025% solution (0.016+/-0.002 mg/kg) IV % dose recovered in 5 d. Volunteers with healthy and inflamed skin, 11 males, 6 females, 49-60 yr old Scintillation counting

BLOOD SERUM; FECES; URINE; DELIBERATE EXPOSURE; GERMANY; ADULTS; INFECTION; ANTIFUNGAL AGENTS; DRUGS; DRUG THERAPY; SKIN; BIOACCUMULATION; BIOPSIES; RADIONUCLIDES

Putzschke, K.; Ritter, W.; Siefert, H.M.; Weber, H.; Wegner, L.A. 1983 Arzneimittel-Forschung/Drug Research 33(1):746-750

1H-Imidazole, 2-(2,2-diphenylcyclopropyl)-4,5-dihydro
58267-01-0
C18-H18-N2

Tissue	Cases Exposure Route	Range	Mean	General Information
11114 Blood, plasma	86 Ingestion	380-1100 ng/ml	663 ng/ml	Maximum, 1-2.5 hr after single 160 mg dose. Kinetic data based on age also given. 23-76 yr old healthy volunteers HPLC

BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; DRUGS; ANTIARRHYTHMIC AGENTS; AGE

Brassell, R.K.; Rees, M.M.C.; Khoo, K.-C.; Sruna, A.J.; Sander, D.; Hannigan, J. 1984 Clinical Pharmacology and Therapeutics 36(5):613-619

1H-Imidazole, 2-(2,2-diphenylcyclopropyl)-4,5-dihydro
58267-01-9
C18-H18-N2

Tissue	Cases Exposure Route	Range	Mean	General Information
11115 Blood, plasma	4 Ingestion	a) 111-200 ng/ml b) 202-317 ng/ml c) 284-455 ng/ml d) 430-734 ng/ml e) 469-616 ng/ml f) 521-847 ng/ml g) 708-1290 ng/ml	a) 204+/-77 ng/ml b) 268+/-84 ng/ml c) 380+/-66 ng/ml d) 546+/-126 ng/ml e) 570+/-58 ng/ml f) 758+/-156 ng/ml g) 939+/-217 ng/ml	a) 1-2 hr after 65 mg b) 2 hr after 97.5 mg c) 1-3 hr after 130 mg d) 1-3 hr after 162.5 mg e) 2-3 hr after 195 mg f) 1-2 hr after 227.5 mg g) 1-2 hr after 260 mg Peaks after 7 ascending doses, given 1 wk apart. Healthy 22-24 yr old volunteers HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ANTIARRHYTHMIC AGENTS; DRUGS; METABOLISM Khoo, K.C.; Sunna, A.J.; Colburn, W.A.; Aoguichi, K.; Morganroth, J.; Brazzell, R.K. 1984 Journal of Clinical Pharmacology 24:283-288				

Tissue	Cases Exposure Route	Range	Mean	General Information
11116 Blood, plasma	a) 6 b) 6 Ingestion	a) 28-626 ng/ml b) 57-286 ng/ml	a) 221 ng/ml b) 189 ng/ml	a) Concentration which reduced number of premature ventricular complexes by 50% b) Concentration which reduced number of ventricular complexes by 50% Data suggest antiarrhythmic effect is proportional to dose. Volunteers with heart disease HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; ANTIARRHYTHMIC AGENTS; BIOACCUMULATION Brazzell, R.K.; Aoguichi, K.; Heger, J.J., Jr.; Somberg, J.C.; Carliner, N.H.; Morganroth, J. 1984 Clinical Pharmacology and Therapeutics 35(3):307-316				

Tissue	Cases Exposure Route	Range	Mean	General Information
11117 Urine	86 Ingestion	49.6-187.60 mg	Not given	Total for 72 hr after single 160 mg dose. Kinetic data based on age also given. 22-78 yr old healthy volunteers HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; DRUGS; ANTIARRHYTHMIC AGENTS; AGE Brazzell, R.K.; Rees, M.M.C.; Khoo, K.-C.; Sunna, A.J.; Sander, D.; Hannigan, J. 1984 Clinical Pharmacology and Therapeutics 36(5):613-619				

1H-Imidazole, 2-(2,4-difluorophenyl)-4,5-bis(4-methoxyphenyl)-
78445-46-2
C23-H18-F2-N2-O2

Tissue	Cases Exposure Route	Range	Mean	General Information
11116 Blood, plasma	6 Ingestion	a) 82-1 ng/ml b) 220-13 ng/ml c) 800-26 ng/ml	a) Not given b) Not given c) Not given	a) About 1-1.5 and 24 hr after 0.1 mg/kg dose, as 0.5 mg/ml aqueous suspension b) After 1 mg/kg, as 5 mg/ml suspension c) After 2 mg/kg, as 5 mg/ml suspension Ranges of means. Mono- and didemethylated fenflumizole also found, at about 3-6% of parent drug levels. All three detected in urine, <0.1% of administered dose being recovered in 24 hr. Some values estimated from figure. Healthy 24-41 yr old volunteers, wt 62-83 kg LC

BLOOD PLASMA; DELIBERATE EXPOSURE; ANALGESICS; ANTIINFLAMMATORY AGENTS; ANTIPYRETICS; DRUGS; METABOLISM; METABOLITES
Midskov, C.; Vinge E.; Andersson, K.-E. 1984 Acta Pharmacologica et Toxicologica 54:408-413

1H-Imidazole, 4,5-bis(4-fluorophenyl)-2-((1,1,2,2-tetrafluoroethyl)sulfonyl)-
62804-89-7
C17-H10-F6-N2-O2-S

Tissue	Cases Exposure Route	Range	Mean	General Information
11119 Blood, plasma	17 Ingestion	a) 800-60 ng/ml b) 625 ng/ml c) 800-70 ng/ml d) 1000-75 ng/ml e) 1800-260 ng/ml	a) Not given b) Not given c) Not given d) Not given e) Not given	a) Day 18 and 70. Total 8.25 mg given over 14 d, 5 cases b) 19.75 mg given over 14 d, 1 case c) Day 18 and 115. 16.5 mg over 14 d, 5 cases d) Day 30 and 86. 24.25 mg over 28 d, 5 cases e) Day 25 and 100. 17.5-24.5 mg over 15-20 d, 6 cases a, c), d) and e) ranges of means, estimated from figure. b) Peak. Treatment schedules began with 2-12 mg loading dose, then 0.25-0.75 maintenance doses. Drug almost completely eliminated by gastrointestinal excretion. Marked decrease in half-life after cholestyramine administration. 20-66 yr old patients with active rheumatoid arthritis Mild side effects including brief abdominal discomfort in a few HPLC

BLOOD PLASMA; SYNOVIAL FLUID; DELIBERATE EXPOSURE; RHEUMATOID ARTHRITIS; ANTIINFLAMMATORY AGENTS; ANTIPYRETICS; ANALGESICS; DRUGS; METABOLISM; DRUG THERAPY
Narhi, D.; Drumgoole, S.H.; Rabestraw, D.C.; Paulus, H.E. 1984 Clinical Pharmacology and Therapeutics 36(1):92-98

Tissue	Cases Exposure Route	Range	Mean	General Information
11120 Blood, plasma	8 Ingestion	0.47-0.9 ug/ml	Not applicable	0-700 hr following 5 mg dose. Roughly linear, data from graph. Healthy volunteers, fasted overnight HPLC

BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; BIOACCUMULATION
Rabestraw, D.C.; Whitney, C.C., Jr. 1984 Journal of Pharmaceutical Sciences 73(12):1829-1830

1H-Imidazole, 4,5-bis(4-fluorophenyl)-2-((1,1,2,2-tetrafluoroethyl)sulfonyl)-
62594-59-7
C17-H10-F6-N2-O2-S

Tissue	Cases Exposure Route	Range	Mean	General Information
11121 Synovial fluid	2 Ingestion	About 800-85 ng/ml	Not given	Day 14 and 45. 10 mg given on d 1, 0.50 mg/d on d 2-14. Lower levels than in plasma may reflect lower protein concentration in joint fluid, since drug is reportedly 99% bound to plasma protein. 55-60 yr old patients with active rheumatoid arthritis HPLC
BLOOD PLASMA; SYNOVIAL FLUID; DELIBERATE EXPOSURE; RHEUMATOID ARTHRITIS; ANTIINFLAMMATORY AGENTS; ANTIPYRETICS; ANALGESICS; DRUGS; METABOLISM; DRUG THERAPY Narhi, D.; Dromgoole, S.H.; Rahestraw, D.C.; Paulus, H.E. 1984 Clinical Pharmacology and Therapeutics 36(1):92-96				

1H-Indazole-3-carboxylic acid, 1-(2,4-dichlorophenyl)methyl)-
50264-69-2
C15-H10-Cl2-N2-O2

Tissue	Cases Exposure Route	Range	Mean	General Information
11122 Blood, plasma	a) 7 b) 7 c) 22 Ingestion	a) 8.02-46.06 ug/ml b) 6.56-40.85 ug/ml c) 4.5-26 ug/ml	a) 22.4+/-15.1 ug/ml b) 21.8+/-13.4 ug/ml c) Not given	a) Peaks at 3.5 and 1.25 hr after 600 mg, capsule form b) At 4.5 and 1.25 hr after 300 mg, tablet form c) At 1.5 hr after 250-700 mg/d for 5d-3 mo Ranges of peaks. Level before dosage in c) 0.4-7 ug/ml, with mean of 2.06 ug/ml in responders, 1.5 ug/ml in nonresponders. Erratic absorption more frequent with capsules than tablets. Determination of some pharmacokinetic parameters will require IV administration, which may be a clinical improvement as well. 38-68 yr old cancer patients Gastrointestinal side effects in some subjects after 600 mg dose HPLC
11128 Urine	a) 7 b) 7 Ingestion	a) 66-86% b) 58-86%	a) 78.6+/-9.2% b) 78.8+/-11.6%	a) Total eliminated after 48 hr. Dose 600 mg capsule b) Dose 300 mg tablet Unchanged fraction in both cases <10%. 38-68 yr old cancer patients HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; NEOPLASMS; ANTITUMOR AGENTS; DRUGS; CHEMOTHERAPY; METABOLISM Bonner, J.-G.; Leclaire, R.; Bond, P.R.; Deschamps, M.; De Sanctis, A.J.; Catanese, B. 1984 Oncology 41(suppl 1):48-52				

1H-Indene-3-acetic acid, 5-fluoro-2-methyl-1-((4-methylsulfinyl)phenyl)methylene)-, (Z)-
38194-50-2
C20-H17-F-O3-S
MW 356.4, MP 182-186 C (dec)

Tissue	Cases Exposure Route	Range	Mean	General Information
11124 Blood, plasma	a) 20 b) 9 c) 6 d) 20 e) 9 f) 6 g) 20 h) 9 i) 6 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 2.2+/-0.9 ug/ml b) 5.0+/-3.1 ug/ml c) 5.7+/-1.5 ug/ml d) 2.2+/-0.9 ug/ml e) 2.8+/-2.5 ug/ml f) 2.4+/-1.0 ug/ml g) 2.5+/-2.3 ug/ml h) 1.5+/-0.5 ug/ml i) 1.9+/-0.8 ug/ml	a) Normal, peak b) Fair liver function (FLF), peak c) Poor liver function (PLF), peak d) Sulfide metabolite, normal, peak e) Sulfide metabolite, FLF, peak f) Sulfide metabolite, PLF, peak g) Sulfone metabolite, normal, peak h) Sulfone metabolite, FLF, peak i) Sulfone metabolite, PLF, peak 200 mg doses. Healthy volunteers, and patients with alcoholic liver disease HPLC
BLOOD SERUM; BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; LIVER DISEASES; DRUG THERAPY; DRUGS; BIOACCUMULATION; METABOLISM; METABOLITES; ALCOHOLIC BEVERAGES Juhl, R.P.; Van Thiel, D.H.; Dittert, L.W.; Albert, K.S.; Smith, R.B. 1983 Clinical Pharmacology and Therapeutics 34(1):104-109				

Tissue	Cases Exposure Route	Range	Mean	General Information
11125 Blood, plasma	4 Ingestion	a) 12-0.5 ug Eq/ml b) 12-1.8 ug Eq/ml c) 6-1.6 ug Eq/ml	a) Not given b) Not given c) Not given	a) 0.5-12 hr during last interval of 200 mg/12 hr for 7 days b) Sulfide metabolite 0.5-12 hr during last interval of 200 mg/12 hr for 7 days c) Sulfone metabolite 0.5-12 hr during last interval of 200 mg/12 hr for 7 days Estimated from graphs Healthy 22-30 yr olds HPLC
ADULTS; BLOOD PLASMA; ANTIINFLAMMATORY AGENTS; DRUGS; COMPARATIVE EVALUATIONS Dujovne, C.A.; Pitterman, A.; Vincek, W.C.; Dobrinska, M.R.; Davies, R.O.; Duggan, D.E. 1983 Clinical Pharmacology and Therapeutics 33(2):172-177				

Tissue	Cases Exposure Route	Range	Mean	General Information
11126 Blood, plasma	15 Ingestion	a) Not given b) Not given	a) 15.2 ug/ml b) 19.8 ug/ml	a) After 1 wk of 300 mg/d b) After 1 wk of 300 mg/d and 2nd wk 400 mg/d Parent compound, sulfone and sulfide metabolites included in total. 6 males, 9 females, 20-30 yr old healthy volunteers
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; RHEUMATOID ARTHRITIS; ANALGESICS; ANTIPYRETICS; BIOACCUMULATION; DRUGS Lanza, F.L.; Nelson, R.S.; Rack, M.F. 1984 Journal of Clinical Pharmacology 24:89-95				

1H-1,4-Benzodiazepine-8-carboxylic acid, 7-chloro-2,3-dihydro-2-oxo-5-phenyl-, monopotassium salt, compd. with potassium hydroxide (1:1)
57109-90-7
C16-H11-Cl-N2-O3.H-K-O.K
MW 406.9

Tissue	Cases Exposure Route	Range	Mean	General Information
11127 Blood, plasma				Review. Pharmacokinetic properties and metabolism of benzodiazepines, relating differences among drugs to differences in clinical action. Use as marker compounds for evaluation of changes in metabolizing capacity in old age discussed.
BLOOD PLASMA; DELIBERATE EXPOSURE; AGE; ADULTS; DRUGS; BENZODIAZEPINES; REVIEW; DIAZEPAMS; METABOLISM; METABOLITES; BIOAVAILABILITY; BIOACCUMULATION Greenblatt, D.J.; Divoll, M.; Abernethy, D.R.; Ochs, H.R.; Shader, R.J. 1985 Drug Metabolism Reviews 14(2):351-392				

Tissue	Cases Exposure Route	Range	Mean	General Information
11126 Blood, serum	8 Ingestion	a) 461-961+/-157 ng/ml b) 527-5.5 ng/ml S.E.	a) 650+/-157 ng/ml b) Not given S.E.	a) Maximum levels, at 0.5-1.5 hr b) At 0.75 hr-14.5 d, 1 case After 40 mg dose. Measured as desmethyldiazepam. Estimated from graph. Healthy volunteers, 19-26 yr, 55-90 kg GC-EC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; BENZODIAZEPINES; DRUGS; METABOLISM; DIAZEPAMS Ochs, H.R.; Greenblatt, D.J.; Verburg-Ochs, B.; Loeniker, A. 1984 Journal of Clinical Pharmacology 24:446-451				

1H-1,5-Benzodiazepine-2,4(3H,5H)-dione, 7-chloro-1-methyl-5-phenyl-
22316-47-8
C16-H13-Cl-N2-O2
MW 300.74, MP crystals 160-162 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11129 Blood, plasma	a) 7 b) 5 c) 6 d) 6 e) 7 f) 5 g) 6 h) 6 Ingestion	a) 58-218 ng/ml b) 108-287 ng/ml c) 185-392 ng/ml d) 94-265 ng/ml e) 117-251 ng/ml f) 193-368 ng/ml g) 178-408 ng/ml h) 160-328 ng/ml	a) 111 ng/ml b) 166 ng/ml c) 264 ng/ml d) 202 ng/ml e) 165 ng/ml f) 250 ng/ml g) 317 ng/ml h) 252 ng/ml	a) Trough, young male b) Trough, young female c) Trough, elderly male d) Trough, elderly female e) Peak, young male f) Peak, young female g) Peak, elderly male h) Peak, elderly female Steady-state, determined at end of 10 mg/d for 22 d regimen. Data also given for desmethyl-metabolite. Elderly males accumulated ($p<0.01$) parent and metabolite. Young and elderly volunteers, 13 males, 13 females, 19-72 yr old GC-EC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; SEX; AGE; BEHAVIOR DISORDERS; DRUGS; DRUG THERAPY; SEDATIVES; BIOACCUMULATION; METABOLITES Greenblatt, D.J.; Divoll, M.; Puri, S.K.; Ho, I.; Zinny, M.A.; Shader, R.J. 1985 Clinical Pharmacokinetics 8:83-94				

1H-2-Benzoxacyclotetradecin-1-one, 3,4,5,6,7,8,9,10,11,12-decahydro-7,14,16-trihydroxy-3-methyl-, (3S,7R)-(+)- (8 CI); 1H-2-Benzoxacyclotetradecin-1-one, 3,4,5,6,7,8,9,10,11,12-decahydro-7,14,16-trihydroxy-3-methyl-, (3S-(3R*,7S*))- (9 CI)
26538-44-3
C18-H26-O6
MW 522.41

Tissue	Cases Exposure Route	Range	Mean	General Information
11130 Blood	6 Ingestion	0.104+/-0.66-0.014+/-0.00	Not applicable	0.5-96 hr, peaks (0.280+/-0.176 and 0.161+/-0.079) 1.0 and 9.0 hrs after 75 mg [H-3] parent drug. Units are P-value, defined as (concentration in dpm/ml)/(dose expressed as dpm/g body wt). Healthy volunteers Scintillation counting
11131 Urine	6 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 55.1+/-8.6% b) 10.4% c) 12.8% d) 23.9%	a) Total radioactivity b) Conjugated parent drug c) Conjugated zearalanone metabolite d) Unknown metabolite % dose recovered 120 hr after 75 mg [H-3] parent drug. Healthy volunteers Scintillation counting

BLOOD; URINE; DELIBERATE EXPOSURE; DRUGS; HORMONES; AGRICULTURE; ANIMAL POPULATIONS; BIOACCUMULATION; FOOD ADDITIVES; MEAT; METABOLITES; POPULATION EXPOSURE; RADIONUCLIDES

Migdalof, B.H.; Dugger, H.A.; Heider, J.G.; Coombs, R.A.; Terry, M.K. 1983 Xenobiotica 13(4):209-221

11-Nor-delta(9)-tetrahydrocannabinol-9-carboxylic acid (No postings in CHEMLINE).

Tissue	Cases Exposure Route	Range	Mean	General Information
11132 Urine		Negative->100 ng/ml	Not given	Cannabinoid metabolite Substantially modified assay procedure. Results identical when rechecked by EMIT or GC/MS. 0-25% quantitative variation after 6 mo storage. Similar protocol applicable to blood analysis. Driving-under-the-influence cases and suspects RIA

URINE; CONSUMER EXPOSURE; DRUGS; PSYCHOTROPIC DRUGS; FORENSIC MEDICINE; MEASUREMENT METHODS; METABOLITES

Childs, P.S.; Horton McCurdy, N. 1984 Journal of Analytical Toxicology 8:220-223

Tissue	Cases Exposure Route	Range	Mean	General Information
11133 Urine	6	13-450 ng/mL	Not given	Major metabolite measured by improved procedure. Representative chromatograms also shown. Samples from U.S. Naval Laboratories GC-EC

URINE; CONSUMER EXPOSURE; UNITED STATES; DRUGS; MEASUREMENT METHODS; METABOLITES; FORENSIC MEDICINE; PSYCHOTROPIC DRUGS

ElSohly, M.A.; Arafat, E.S.; Jones, A.B. 1984 Journal of Analytical Toxicology 8:7-9

18,19-Dinor-17alpha-pregn-4-en-20-yn-3-one, 13-ethyl-17-hydroxy- (8 CI); 18,19-Dinorpregn-4-en-20-yn-3-one, 13-ethyl-17-hydroxy-, (17alpha)- (9 CI)
797-68-7
C21-H28-O2

Tissue	Cases Exposure Route	Range	Mean	General Information
11184 Blood, plasma	18 Ingestion	a) 3.6-6.0 ng/ml b) 0.3-0.5 ng/ml c) 2.9-12.5 ng/ml d) 0.1-0.9 ng/ml	a) 5.3 ng/ml b) Not given c) 6.5 ng/ml d) Not given	a) Peaks, 2 hr after dose, in well-nourished group of 4 b) 72-74 hr c) Peaks, 2 hr after dose, in under-nourished group of 9 d) 72-74 hr Combination pill, containing 150 ug (and 50 ug ethynylestradiol). Wt/ht(E-2)X100 of subjects in a), b) >0.200. Subjects in c), d) <0.200. Levels in first group decline tri-exponentially. Mean half-life 49.7 hr. Bi-exponential decline in second group. 50.5 hr half-life. 25-35 yr old Indian women RIA

BLOOD PLASMA; DELIBERATE EXPOSURE; INDIA; NUTRITIONAL DEFICIENCIES; ORAL CONTRACEPTIVES; DRUGS; COMPARATIVE EVALUATIONS; METABOLISM
Nair, K.M.; Sivakumar, B.; Prema, K.; Rao, B.S.N. 1983 European Journal of Clinical Pharmacology 24:355-359

19-Nor-17alpha-pregna-1,3,5(10)-trien-20-yne-3,17-diol (8 CI); 19-Norpregna-1,3,5(10)-trien-20-yne-3,17-diol, (17alpha)- (9 CI)
57-63-6
C20-H24-O2
MW 296.39, MP 141-146 C (hemihydrate)

Tissue	Cases Exposure Route	Range	Mean	General Information
11185 Bile	8 Ingestion	a) 31-41% b) 8-10% c) 8-22% d) Not applicable e) Not applicable	a) 37% b) 10% c) 16% d) 41.9% e) 26.3%	a) Parent compound, 5 cases, endoscopy sample c) 2-hydroxy-metabolite, 3 cases, endoscopy sample c) 2-methoxy-metabolite, 5 cases, endoscopy sample d) Total radioactivity, 1 case, T-tube sample e) Total radioactivity, 1 case, T-tube sample % radioactivity recovered 4 hr (a-c) or 24 hr (d-e) after 50 ug. Caucasian volunteers, 46-76 yr old, wt 49-77 kg Scintillation counting; HPLC
11186 Urine	8 Ingestion	a) 6.6-39.0% b) Not applicable c) Not applicable	a) 16.6+/-7.8% b) 28.6% c) 27.5%	a) 6 patients who underwent upper gastrointestinal endoscopy b) Patient with cholelithiasis c) Patient with cholelithiasis % of dose recovered in 72 hr after 50 ug. Caucasian volunteers, 46-76 yr old, wt 49-77 kg Scintillation counting; HPLC

BILE; URINE; DELIBERATE EXPOSURE; ADULTS; UNITED KINGDOM; ORAL CONTRACEPTIVES; DRUGS; HORMONES; BIOACCUMULATION; RADIONUCLIDES
Maggs, J.L.; Grimmer, S.F.M.; Orme, M.L'E.; Breckenridge, A.M.; Park, B.K.; Gilmore, I.T. 1983 Xenobiotica 13(7):421-431

2(1H)-Isoquinolinecarboxamidine, 3,4-dihydro- (8 CI); 2(1H)-Isoquinolinecarboximidamide, 3,4-dihydro- (9 CI)
1131-64-2
C10-H13-N3
MW 175.23

Tissue	Cases Exposure Route	Range	Mean	General Information
11137 Blood, plasma	a) 4 b) 3 Ingestion	a) Not given b) Not given	a) 21.9+/-2.9 ng/ml b) 72.7+/-11.8 ng/ml	a) Extensive metabolizer phenotype b) Poor metabolizer phenotype Peaks at 65 hr after 10 mg. Healthy volunteers, 20-45 yr old, wt 63-92 kg GC-EC
11138 Urine	10 Ingestion	a) 7.7-27.4% b) 18.8-27.8% c) 2.9-8.6% d) 27.8-49.5% e) 1.4-2.5% f) 2.5-5.6%	a) 13.1+/-6.2% b) 23.0+/-3.2% c) 5.8+/-2.2% d) 35.8+/-8.1% e) 2.1+/-0.4% f) 3.6+/-1.3%	a) Extensive metabolizers phenotype, 5 cases, parent compound b) 4-OH metabolite c) Phenolic metabolites d) Poor metabolizer phenotype, 5 cases, parent compound e) 4-OH metabolite f) Phenolic metabolites % dose recovered in 12 hr after 10 mg. Healthy volunteers, 20-45 yr old, wt 63-92 kg GC-EC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; UNITED KINGDOM; DRUGS; DRUG THERAPY; BIOACCUMULATION; GENETIC EFFECTS Sloan, T.P.; Lancaster, R.; Shah, R.R.; Idle, J.R.; Smith, R.L. 1983 British Journal of Clinical Pharmacology 15:443-450				

2(1H)-Quinazolinone, 1-isopropyl-7-methyl-4-phenyl- (8 CI); 2(1H)-Quinazolinone, 7-methyl-1-(1-methylethyl)-4-phenyl- (9 CI)
22760-18-5
C18-H18-N2-O

Tissue	Cases Exposure Route	Range	Mean	General Information
11139 Blood, plasma	5 Ingestion Injection	a) 0.020-0.088% dose/L b) 0.016-0.241% dose/L c) 600-10 ng/mL d) 7000-10 ng/mL	a) 0.051+/-0.034% dose/L b) 0.083+/-0.090% dose/L c) Not given d) Not given	a) Peaks, 45-180 min after 300 mg, oral b) Peaks, 30-240 min after 900 mg, oral d) 0.75-9.5 hr after 900 mg oral, 1 subject d) 1.5 min and 7 hr, 200 ng/mL at 1.5 hr, after 75 mg IV, 1 subject c-d) estimated from graph. Subjects supine for 24 hr after dose. Healthy adult volunteers, 22-24 yr, 68-83 kg, 174-185 cm ht, nonsmokers. X-ray fluores
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; ANTIINFLAMMATORY AGENTS; DRUGS; METABOLISM; METABOLITES Hinderling, P.H.; Roos, A. 1984 Journal of Pharmaceutical Sciences 73(3):332-340				

2(1H)-Quinolinone, 5-(3-((1,1-dimethylethyl)amino)-2-hydroxypropoxy)-3,4-dihydro-
51781-06-7
C16-H24-N2-O3

Tissue	Cases Exposure Route	Range	Mean	General Information
11140 Blood, plasma	20 Ingestion	a) 41-1 ng/ml b) 1-45 ng/ml	a) Not applicable b) Not applicable	a) Dose response of group receiving 60, 20, 2.5, and 0.5 mg daily at 2, 4, 6, and 8 wk b) Dose response of group receiving 0.5, 2.5, 20, and 60 mg daily at 2, 4, 6, and 8 wk beta blockade independent of dose, effective antihypertensive. 15 black, 5 white volunteer patients RIA
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; CARDIOVASCULAR DISEASES; HEART DISEASES; BETA BLOCKER; BIOACCUMULATION; BIOLOGICAL MONITORING; HYPERTENSION; DRUGS Giles, T.D.; Sander, G.E.; Kancich, A.; Quiros, A.C. 1984 Clinical Pharmacology and Therapeutics 35(3):301-306				

2-Benzoxazolinone, 5-chloro- (8 CI); 2(3H)-Benzoxazolone, 5-chloro- (9 CI)
95-25-0
C7-H4-Cl-N-O2
MW 169.58, MP 191-191.5 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11141 Blood, plasma	25 Ingestion	a) Not given b) Not given	a) 36.3+/-2.3 ug/ml b) 4084+/-284 ug.min/ml	a) Peak 38+/-3.3 min after 750 mg and 900 mg acetominophen b) Area under curve, 10 hr after 750 mg and 900 mg acetominophen. Healthy volunteers, 20-39 yr old GC
11142 Urine	25 Ingestion	Not given	74+/-3.4%	% recovery of 6-hydroxychlorsoxasone glucuronide metabolite 10 hr after 750 mg ad 900 mg acetominophen. Healthy volunteers, 20-39 yr old GC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; MUSCLE RELAXANTS; DRUGS; DRUG THERAPY; BIOACCUMULATION Desiraju, R.K.; Renzi, N.L., Jr.; Nayak, R.K.; Ng, K.-T. 1983 Journal of Pharmaceutical Sciences 72(9):991-994				

2-Butanol, 4-(dimethylamino)-3-methyl-1,2-diphenyl-, propionate (ester), (2S,3R)- (8 CI); Benzeneethanol, alpha-(2-(dimethylamino)-1-methylethyl)-alpha-phenyl-, propanoate (ester), (S-(R*,S*))- (9 CI)
469-62-5
C22-H29-N-O2
MW 339.48, MP 75-76 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11143 Blood	1 Ingestion	Not applicable	87.8 mg/L	Postmortem levels after taking >12 Darvocet-N tablets 19 yr old male Caucasian, wt 77 kg, ht 1.85 m Unconsciousness, probably at >2 hr, <7 hr, death <14 hr, possibly <7 hr after ingestion of tablets GC/MS
DELIBERATE EXPOSURE; DRUGS; SUICIDE; AUTOPSIES; BLOOD; URINE; ANALGESICS Eberhardt, R.D.; Cash, D.K. 1984 Journal of Analytical Toxicology 8:246-247				

2-Butanol, 4-(dimethylamino)-3-methyl-1,2-diphenyl-, propionate (ester), (2S,3R)- (8 CI); Benseneethanol, alpha-(2-(dimethylamino)-1-methylethyl)-alpha-phenyl-, propanoate (ester), (S-(R*,S*))- (9 CI)
469-62-5
C22-H29-N-O2
MW 339.48, MP 75-76 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11144 Blood	a) 96 b) 57 c) 19 d) 32 e) 34	a) 1.0-38.8 mg/l b) 0.1-62 mg/l c) 0.1-18 mg/l d) 1.0-37 mg/l e) 1.8-23 mg/l	a) 8.5 mg/l b) 2.7 mg/l c) 5.5+/-5.8 mg/l d) 8.0 mg/l e) 8.9 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths, 1979-1980 d) Single-drug deaths, without ethanol, 1975-1980 e) Single-drug deaths, with ethanol, 1975-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Tissue	Cases Exposure Route	Range	Mean	General Information
11145 Blood, plasma	6 Ingestion	a) 90.4-709 ng/ml b) 169-1631 ng/ml	a) Not given b) Not given	a) Propoxyphene, maximum at 2 hr, declines exponentially b) Noropropoxyphene (metabolite), levels high throughout 9 hr period Concentrations varied greatly among patients. Six 65 mg doses in 16 hr. Healthy nursing mothers, 20-29 yr, 5 in hospital after cesarean section, 1 ten months after delivery Nausea, 1 subject HPLC
11146 Milk	6 Ingestion	a) 24.2-210 ng/ml b) 54.1-606 ng/ml	a) Not given b) Not given	a) Propoxyphene b) Noropropoxyphene Concentrations varied greatly among patients. Six 65 mg doses in 16 hr. Healthy nursing mothers, 20-29 yr, 5 in hospital after cesarean section, 1 ten months after delivery Nausea, 1 subject HPLC
BLOOD SERUM; MILK; DELIBERATE EXPOSURE; ADULTS; DRUGS; ANALGESICS Kunka, R.L.; Venkataramanan, R.; Stern, R.M.; Ladik, C.P. 1984 Clinical Pharmacology and Therapeutics 35(5):675-680				

2-Heptenoic acid, 7-((2-amino-2-carboxyethyl)thio)-2-(((2,2-dimethylcyclopropyl)carbonyl)amino)-, monosodium salt, (R-(R*,S*-(Z)))-
81129-83-1
C16-H26-N2-O5-S.Na

Tissue	Cases Exposure Route	Range	Mean	General Information
11147 Blood, plasma	4 Injection	a) 21.3-28.0 b) 5.9-7.7 c) 2.0-3.7 d) 20.5-25.7 e) 6.5-9.5 f) 2.6-3.6 g) 19.3-25.3 h) 6.6-9.5 i) 2.4-3.9 ug equiv/ml	a) 22.4+/-1.3 b) 7.0+/-1.8 c) 2.9+/-0.8 d) 22.4+/-2.3 e) 8.1+/-1.3 f) 3.1+/-0.5 g) 22.8+/-2.6 h) 8.3+/-1.2 i) 3.3+/-0.6 ug equiv/ml	a) 0.33 hr b) 1.0 hr c) 2.0 hr d) 0.33 hr e) 1.0 hr f) 2.0 hr g) 0.33 hr h) 1.0 hr i) 2.0 hr HPLC data, after 250 mg (20 uCi) C-14 labeled IV infusion over 20 min. d)-f) 250 mg imipenem given simultaneously. g)-i) 1000 mg imipenem given simultaneously. Paper also gives radiometric levels. Healthy volunteers, 30-31 yr, 71-87 kg, 180-192 cm ht HPLC; Scintillation counting
BLOOD PLASMA; URINE; FECES; DELIBERATE EXPOSURE; ADULTS; DRUGS; DRUG INTERACTION; ANTIBIOTICS; METABOLISM Norrby, S.R.; Rogers, J.D.; Ferber, F.; Jones, K.H.; Zacchei, A.G.; Weidner, L.L.; Demetriades, J.L.; Gravallese, D.A.; Hsieh, J.Y.-K. 1984 Antimicrobial Agents and Chemotherapy 26(5):707-714				

Tissue	Cases Exposure Route	Range	Mean	General Information
11148 Blood, plasma	6 Injection	a) 48.06-85.00 ug/ml b) 8.97-18.70 ug/ml c) 1.02-2.67 ug/ml d) 52.29-81.54 ug/ml e) 7.64-16.00 ug/ml f) 0-2.08 ug/ml g) 56.90-78.26 ug/ml h) 7.49-15.93 ug/ml i) 0.76-1.21 ug/ml	a) 65.04+/-14.73 ug/ml b) 12.31+/-3.77 ug/ml c) 1.56+/-0.63 ug/ml d) 65.18+/-11.65 ug/ml e) 10.62+/-3.00 ug/ml f) 0.94+/-0.65 ug/ml g) 64.37+/-8.47 ug/ml h) 11.43+/-2.84 ug/ml i) 0.99+/-0.16 ug/ml	a) 0 hr after 1st dose b) 1.5 hr after 17th dose c) 4.5 hr after 37th dose d) 0 hr after 1st dose e) 1.5 hr after 17th dose f) 4.5 hr after 37th dose g) 0 hr after 1st dose h) 1.5 hr after 17th dose i) 4.5 hr after 37th dose 1000 mg IV over 30 min every 6 hr for 40 doses. Given with 1000 mg IV imipenem. Healthy volunteers, 19-34 yr, 54.5-85.5 kg HPLC
11149 Urine	6 Injection	a) 369.5-615.0 mg b) 100.2-318.6 mg c) 16.2-79.6 mg d) 658.6-751.1 mg	a) 486.8+/-94.7 mg b) 164.0+/-83.0 c) 32.3+/-24.3 mg d) 696.6+/-33.9 mg	a) 0-2 hr b) 2-4 hr c) 4-6 hr d) 0-6 hr Total amount excreted during time periods after 1st of 40 doses, 1000 mg IV over 30 min every 6 hr. Given with 1000 mg IV imipenem. Healthy volunteers, 19-34 yr, 54.5-85.5 kg HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; ANTIBIOTICS; DRUGS; DRUG INTERACTION Drusano, G.L.; Standiford, H.C.; Bustamante, C.; Forrest, A.; Rivera, G.; Leslie, J.; Tatem, B.; Delaportas, D.; MacGregor, R.R.; Schimpff, S.C. 1984 Antimicrobial Agents and Chemotherapy 26(5):715-721				

2-Heptenoic acid, 7-((2-amino-2-carboxyethyl)thio)-2-(((2,2-dimethylcyclopropyl)carbonyl)amino)-, monosodium salt, (R-(R*,S*-(Z)))-
81129-83-1
C16-H26-N2-O5-S.Na

Tissue	Cases Exposure Route	Range	Mean	General Information
11160 Urine	4 Injection	a) 61.0-71.8% b) 6.2-11.1% c) 0.9-1.9% d) 61.5-70.6% e) 6.2-10.6% f) 0.7-1.6% g) 61.9-72.5% h) 6.6-9.8% i) 0.9-2.5% % of dose	a) 65.4+/-4.3% b) 8.2+/-2.1% c) 1.3+/-0.5% d) 67.9+/-3.1% e) 8.0+/-1.0% f) 1.3+/-0.4% g) 66.0+/-4.9% h) 8.4+/-1.4% i) 1.6+/-0.6% % of dose	a) 0-2 hr b) 2-4 hr c) 4-6 hr d) 0-2 hr e) 2-4 hr f) 4-6 hr g) 0-2 hr h) 2-4 hr i) 4-6 hr Collection periods after 250 mg (20 uCi) C-14 labeled IV infusion over 20 min. HPLC data. d)-f) 250 mg imipenem given simultaneously. g)-i) 1000 mg imipenem given simultaneously. Radiometric data also given in paper. Healthy volunteers, 30-31 yr, 71-87 kg, 180-192 cm ht HPLC; Scintillation counting
BLOOD PLASMA; URINE; FECES; DELIBERATE EXPOSURE; ADULTS; DRUGS; DRUG INTERACTION; ANTIBIOTICS; METABOLISM Norrby, S.R.; Rogers, J.D.; Ferber, P.; Jones, K.H.; Zacchei, A.G.; Weidner, L.L.; Demetriades, J.L.; Gravalese, D.A.; Heich, J.Y.-K. 1984 Antimicrobial Agents and Chemotherapy 26(5):707-714				

2-Imidazolidinone, 1-(5-nitro-2-thiazolyl)-
61-57-4
C6-H6-N4-O3-S
MW 214.22, MP 260-262 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11151 Blood, p'asma	4 Ingestion	a) 0.275-0 ug/ml b) 0.0-0 ug/ml c) 0.45-0.05 ug/ml d) 0.20-0 ug/ml e) 0.15-0 ug/ml f) 0.10-0 ug/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable	a) 1-6 hrs, peak (0.75 ug/ml) at 90 min b) 1-24 hr, peak (1.10 ug/ml) at 8 hr, 4-hydroxy metabolite c) 1-24 hr, peak (0.80 ug/ml) at 4 hr, 4-keto metabolite d) 1-1 hr, peak (0.225 ug/ml) at 2 hr, 4,5-dehydro metabolite e) 1-16 hr, peak (0.16 ug/ml) at 2 hr, 5-hydroxy metabolite f) 1-8 hr, peak (0.1 ug/ml) at 1 hr, 4,5-dihydroxy metabolite Time after 15 mg/kg dose. First report of metabolite concentrations (newly identified). Filipino patients, 15-19 yr old. General good health, with positive test for S. JAPONICUM HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; PHILIPPINES; ANTIHELMINTICS; BIOACCUMULATION; BIOAVAILABILITY; DRINKING WATER; METABOLITES Valencia, C.I.; Catto, B.A.; Fairchild, E.H.; Wilson, S.B.; Maramba, N.C.; Webster, L.T., Jr. 1984 Journal of Pharmacology and Experimental Therapeutics 230(1):133-140				

2-Imidazoline, 2-(1-(2,6-dichlorophenoxy)ethyl)- (8 CI); 1H-Imidazole, 2-(1-(2,6-dichlorophenoxy)ethyl)-4,5-dihydro- (9 CI)
31036-80-8
C11-H12-Cl2-N2-O

Tissue	Cases Exposure Route	Range	Mean	General Information
11163 Urine	6 Injection	5.5-20.6%	11.7%	% 0.32 mg [C-14]-drug excreted in 72 hr. Major metabolite was 2,6-dichlorophenol, accounting for approximately 50% of recovered radioactivity. Healthy volunteers, 25-39 yr old, wt 54.5-86.0 kg HPLC
URINE; DELIBERATE EXPOSURE; ADULTS; UNITED KINGDOM; HYPERTENSION; KIDNEY DISEASES; ANTIHYPERTENSIVE AGENTS; DIURETICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; METABOLITES; RADIONUCLIDES Midgley, I.; Fowkes, A.G.; Chasseaud, L.F.; Hawkins, D.R.; Girkin, R.; Kesselring, K. 1983 Xenobiotica 13(2):87-95				

2-Imidazoline, 2-(2,6-dichloroanilino)- (8 CI); Benzenamine, 2,6-dichloro-N-2-imidazolidinylidene- (9 CI)
4205-90-7
C9-H9-Cl2-N3
MW 230.11, MP 305 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11158 Blood, plasma	10 Injection	0.72-3.85 ng/ml	2.55 ng/ml	Steady-state after mean dose of 0.5 mg/d (Range 0.1-1.2 mg/d) for at least 2 wk, dosage was begun at 0.1 mg/d and increased until diastolic pressure fell below 90 mm Hg or decreased at least 10 mm Hg below baseline, or until maximum dose of 1.2 mg/d was reached. Patients with mild to moderate hypertension, 5 females, 5 males, 36-64 yr old GC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; HYPERTENSION; ANTIHYPERTENSIVE AGENTS; DRUGS; DRUG THERAPY; BIOACCUMULATION Velasquez, M.T.; Rho, J.; Marcondo, R.P.; Barr, J. 1983 Clinical Pharmacology and Therapeutics 34(3):341-346				

Tissue	Cases Exposure Route	Range	Mean	General Information
11154 Blood, plasma	7 Injection Ingestion	a) 1.5-0.1 ng/ml b) 0.1-0.1 ng/ml c) 0.1-0.2 ng/ml d) 0.4-0.1 ng/ml e) 0.6-0.1 ng/ml f) 0.6-0.2 ng/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) 0-72 hr, peaks (1.5 and 0.5 ng/ml) immediately and 4 hr after 0.15 mg IV b) 15 min-72 hr, peaks (1.1 and 1.1 ng/ml) 1 and 4 hrs after 0.30 mg tablet c) 15 min-72 hr, peaks (0.7 and 0.6 ng/ml) 4 and 8 hr after 0.35 mg slow release tablet d) 0.5-48 hr, peaks (0.5 and 0.3 ng/ml) 1 and 4 hrs after 0.075 mg tablet e) 0.5-48 hr, peaks (0.7 and 0.8 ng/ml) 1 and 3 hrs after 0.15 mg tablet f) 0.5-48 hr, peak (1.3 and 1.1 ng/ml) 1 and 4 hr after 0.30 mg tablet Multiple dose studies also described. Healthy volunteers, 3 females, 4 males, 22-46 yr old RIA

(next page)

2-Imidazoline, 2-(2,6-dichloroanilino)- (8 CI); Benzenamine, 2,6-dichloro-N-2-imidazolidinylidene- (9 CI)
4205-90-7
C9-H9-Cl2-N3
MW 230.11, MP 305 C

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
11155 Urine	a) 5 b) 6 c) 6 d) 7 e) 7 f) 7 g) 6 h) 6 Injection Ingestion	a) 50-87% b) 41-108% c) 45-97% d) 41-78% e) 28-69% f) 42-80% g) 57-71% h) 53-86%	a) 69% b) 71% c) 62% d) 59% e) 52% f) 62% g) 56% h) 71%	a) 0.15 mg solution b) 0.3 mg tablet c) 0.25 mg slow release d) 0.075 mg tablet e) 0.15 mg tablet f) 0.3 mg tablet g) 2.1 mg tablet h) 1.75 mg slow release % dose excreted (time not indicated). Healthy volunteers, 3 females, 4 males, 22-46 yr old RIA
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; GERMANY; ADULTS; HEART DISEASES; CARDIOVASCULAR DISEASES; HYPERTENSION; ANTIHYPERTENSIVE AGENTS; DRUGS; DRUG THERAPY; BIOACCUMULATION Arndts, D.; Doevendans, J.; Kirsten, R.; Heintz, B. 1988 European Journal of Clinical Pharmacology 34:21-30				

2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo- (8 CI) (VAN) 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S-(4alpha,4aalpha,5alpha,5aalpha,6alpha,12aalpha))- (9 CI)
564-25-0
C22-H24-N2-O8
MW 444.45

Tissue	Cases Exposure Route	Range	Mean	General Information
11156 Blood, serum	a) 58 b) 57 Ingestion	a) 2.5-0.4 mg/l b) 4.2-1 mg/l	a) Not given b) Not given	a) 40 and 124 hr. 2.2 mg/l at 3 hr. Secretory otitis media patients b) 28 and 124 hr. 2.2 mg/l at 3 hr. Patients with nasal polyps Dose regimen 200 mg, then 100 mg every 24th hr (half doses if body wt <35 kg). Levels peak earlier, and decline faster than in respective target tissues. Some values and time points estimated from figure. Patients, age 8-81 with secretory otitis media, and age 15-80 with nasal polyposis, Central Hospital, Karlskrona, Sweden Bioassay
11157 Ear fluid	58 Ingestion	2.5-0.6 mg/l	Not given	10 and 124 hr, in middle ear secretion. Level 1 mg/l at 3 hr. Dose regimen 200 mg, then 100 mg every 24th hr (half doses if body wt <35 kg) Adequate levels (>/= 1 mg/l) present in 84% of cases. Levels similar in youngest and oldest subjects. Drug can also be expected to penetrate similar inflammatory foci in sinuses and bronchi. Ranges of means. 8-81 yr old patients with secretory otitis media, Central Hospital, Karlskrona, Sweden Bioassay

(next page)

2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo- (8 CI) (VAN) 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S-(4alpha,4aalpha,5alpha,5aalpha,6alpha,12aalpha))- (9 CI)
564-25-0
C22-H24-N2-O8
MW 444.48

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
11186 Nasal mucosa	87 Ingestion	1-3.5 mg/l	Not given	8 and 100 hr. Level 1.6 mg/l at 125 hr. Nasal polyp. Dose regimen 300 mg, then 100 mg every 24th hr (half doses if body wt <35 kg). Adequate levels (>/=1 mg/l) present in 82% of cases. Ranges of means. 15-80 yr old patients with nasal polyposis, Central Hospital, Karlskrona, Sweden Bioassay
BLOOD SERUM; EAR FLUID; NASAL POLYP; DELIBERATE EXPOSURE; SWEDEN; AGE; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY Sundberg, L.; Eden, T.; Ernstson, S. 1983 Acta Otolaryngologica 96:501-506				

2-Naphthaleneacetic acid, 6-methoxy-alpha-methyl-, (+)- (8 CI); 2-Naphthaleneacetic acid, 6-methoxy-alpha-methyl-, (S)- (9 CI)
22204-53-1
C14-H14-O3
MW 230.26, MP 155.8 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11189 Blood, plasma	15 Ingestion	a) Not given b) Not given	a) 74.1 ug/ml b) 108.4 ug/ml	a) After 1 wk 500 mg/d b) After 1 wk 500 mg/d and 2nd wk 750 mg/d. 4 males, 11 females, 20-39 yr old healthy volunteers
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; RHEUMATOID ARTHRITIS; ANALGESICS; ANTIPYRETICS; BIOACCUMULATION; DRUGS Lanza, F.L.; Nelson, R.S.; Rack, M.F. 1984 Journal of Clinical Pharmacology 24:89-96				

Tissue	Cases Exposure Route	Range	Mean	General Information
11180 Blood, plasma	12 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 54.8+/-5.9 ug/ml b) 65.1+/-14.2 ug/ml c) 58.0+/-9.9 ug/ml d) 62.8+/-7.5 ug/ml	a) Formulation I, first dose b) Formulation I, second dose c) Formulation II, first dose d) Formulation II, second dose Peaks after 250 mg of formulation I (AFI, Oslo, Norway) or II (Astra-Syntex, Sweden). Higher levels with second dose (taken 1 wk after first dose) thought to be result of inhibition of gastric emptying, possibly due to tension. Healthy volunteers, 6 males, 6 females, 23-42 yr old, wt 45-96 kg HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; COMPARATIVE EVALUATIONS; ANALGESICS; ANTIPYRETICS; DRUGS; DRUG THERAPY; BIOACCUMULATION Aarbakke, J.; Gedeholt, G.; Hoylandskjaer, A. 1983 International Journal of Clinical Pharmacology, Therapy and Toxicology 21(6):281-288				

2-Oxazolepropionic acid, 4,5-diphenyl- (8 CI); 2-Oxazolepropanoic acid, 4,5-diphenyl- (9 CI)
21266-18-6
C18-H15-N-O3
MW 293.34

Tissue	Cases Exposure Route	Range	Mean	General Information
11161 Blood, plasma	12 Ingestion	a) 100+/-6-4+/-1 ug/ml b) 100+/-6-4+/-1 ug/ml	a) Not given b) Not given	a) Fasting state b) Postprandial state Ranges of means at 4 and 240 hr after 1200 mg dose. Levels at 0.67 hr 42+/-7 ug/ml in a), and 28+/-6 ug/ml in b). Food had no effect on bioavailability. Healthy 19-43 yr old volunteers, body wt 56-97 kg. HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ANTIINFLAMMATORY AGENTS; DRUGS; METABOLISM Chiang, S.T.; Knowles, J.A.; Hubsher, J.A.; Ruelius, H.W.; Walker, B.R. 1984 Journal of Clinical Pharmacology 24:381-385				

Tissue	Cases Exposure Route	Range	Mean	General Information
11162 Blood, plasma	12 Ingestion	a) 124+/-7-6.1 mg/ml b) 71+/-3-3.4 mg/ml c) 43+/-4-1.8 mg/ml d) Not given e) Not given f) Not given S.E.	a) Not given b) Not given c) Not given d) 176+/-20 ng/ml e) 78+/-5 ng/ml f) 38+/-6 ng/ml S.E.	a) 1200 mg dose b) 600 mg dose c) 300 mg dose d) 1200 mg dose e) 600 mg dose f) 300 mg dose In a), b), c) total drug levels (bound plus unbound) at peak (3-4 hr) and 240 hr, ranges of means. In d), e), f) unbound drug levels at peak. Healthy adults, 23-38 yr, 46-61 kg, no other medications HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; ANALGESICS; METABOLISM Chiang, S.T.; Lasseter, K.C.; Pluck, E.R.; Janssen, F.W.; Leelavathi, D.; Hubsher, J.A. 1984 Journal of Clinical Pharmacology 24:515-522				

2-Piperidineacetic acid, alpha-phenyl-
19395-41-6
C13-H17-N-O2
MW 219.31

Tissue	Cases Exposure Route	Range	Mean	General Information
11163 Urine	1 Ingestion	14 ug/ml-<1 ug/ml	Not given	4.5 and 14 hr after ingestion of 20 mg Ritalin hydrochloride. Traces remained several days. Improved assay for rapid and sensitive screening of methylphenidate. 42 yr old, wt 205 lb. GC; TLC
URINE; DELIBERATE EXPOSURE; ANTIDEPRESSIVE AGENTS; DRUG ABUSE; DRUGS; MEASUREMENT METHODS Allen, H.W.; Sedgwick, E. 1984 Journal of Analytical Toxicology 8:61-62				

2-Piperidineacetic acid, alpha-phenyl-, methyl ester
113-45-1
C14-H19-N-O2
MW 233.30, MP 74-75 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11164 Blood, plasma	3 Ingestion	a) 17-10 ug/L b) 15-5 ug/L c) 21-6.7 ug/L	a) Not given b) Not given c) Not given	a) 3.3-5.5 hr, 1.1 ug/L at 1 hr b) 2-3.1 hr, 5 ug/L at 1 hr c) 2.3-5 hr, 13 ug/L at 1 hr 1 case each, after 10 mg dose. Hyperactive boys GC
BLOOD PLASMA; DELIBERATE EXPOSURE; CHILDREN; DRUGS; MEASUREMENT METHODS Potts, B.D.; Martin, C.A.; Vere, M. 1984 Clinical Chemistry 30(8):1374-1377				

Tissue	Cases Exposure Route	Range	Mean	General Information
11165 Blood, plasma	a) 5 b) 10 c) 6 d) 5 e) 10 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 3.5+/-0.4 ng/ml b) 7.5+/-0.5 ng/ml c) 10.5+/-1.9 ng/ml d) 152.6+/-24.9 ng/ml e) 322.5+/-32.9 ng/ml	a) Adults, peak 2.2+/-0.4 hr after 0.15 mg/kg b) Adults, peak 2.1+/-0.3 hr after 0.30 mg/kg c) Children with attentional deficit disorder and hyperactivity, peak 1.5+/-0.2 hr after 0.30 mg/kg d) Ritalinic acid metabolite, adults, peak 2.2+/-0.3 hr after 0.15 mg/kg e) Ritalinic acid metabolite, adults, peak 2.2+/-0.2 hr after 0.30 mg/kg Parent drug subject to substantial first pass metabolism and/or hydrolysis in stomach. Healthy adult volunteers, 21-40 yr old, and hyperactive children, 7-12 yr old GC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; CHILDREN; BEHAVIOR DISORDERS; STIMULANTS; DRUGS; DRUG THERAPY; BIOACCUMULATION; METABOLITES Wargin, W.; Patrick, K.; Kilts, C.; Gualtieri, C.T.; Ellington, K.; Mueller, R.A.; Kraemer, G.; Breese, G.R. 1983 Journal of Pharmacology and Therapeutics 226(2):382-386				

Tissue	Cases Exposure Route	Range	Mean	General Information
11166 Blood, serum	7 Ingestion Injection	a) 16.4-42.1 ug/L b) 430-983 ug/L c) 20.7-50.8 ug/L d) 442-845 ug/L e) 405-960 ug/L /mg/kg	a) 27.82+/-9.21 ug/L b) 664+/-197 ug/L c) 34.68+/-14.81 ug/L d) 611+/-152.2 ug/L e) 650+/-226 ug/L /mg/kg	a) 1-2 (mean 1.6+/-0.42) hr after oral dose, fasting before and after, 5 cases b) Metabolite, ritalinic acid (R.A.), 1.1-2.5 hr after dose in a), 5 cases c) 0.5-1.5 (mean 1.00+/-0.35) hr after oral dose with breakfast, 5 cases d) Metabolite, R.A., 0.75-2.0 (mean 1.44+/-0.54) hr after dose in c), 5 cases e) Metabolite, R.A., 4.5-5.5 (mean 4.8+/-0.40) hr after IV dose, fasting before and after, 5 cases Dose 10-15 mg. 7-15 yr old males with hyperactivity, wt 26.7-50.9 kg GC/MS
BLOOD SERUM; DELIBERATE EXPOSURE; CHILDREN; ADOLESCENTS; DRUGS; DRUG THERAPY; COMPARATIVE EVALUATIONS Chan, Y.-P.M.; Swanson, J.M.; Soldin, S.S.; Thiessen, J.J.; Macleod, S.M.; Logan, W. 1983 Pediatrics 72(1):56-59				

2-Propanol, 1-((1-methylethyl)amino)-3-((2-methyl-1H-indol-4-yl)oxy)-, sulfate (2:1) (salt)
66826-94-2
C16-H22-N2-O2.1/2H2-O4-S

Tissue	Cases Exposure Route	Range	Mean	General Information
11167 Blood, plasma	a) 6 b) 5 c) 9 Ingestion	a) 18+/-5.0 ng/ml b) 42+/-27.0 ng/ml c) 42+/-19.2+/-1 ng/ml	a) Not given b) Not given c) Not given	a) 2 and 21 hr after 5 mg. 16+/-10 ng/ml at 1 hr b) 1 and 22 hr after 10 mg. 55+/-25 ng/ml at 3 hr c) 3 and 24 hr after 20 mg. 38+/-30 ng/ml at 1 hr Given as sulphate (corindolan). Ranges of means. Other pharmacokinetic data reported. Some values estimated from figure. Healthy 19-32 yr old volunteers, Germany HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; GERMANY; ANTIHYPERTENSIVE AGENTS; DRUGS; ANTIARRHYTHMIC AGENTS Krause, W.; Schwartzkopff, W. 1983 Arzneimittel-Forschung/Drug Research 33(II)9:1306-1307				

2-Propanol, 1-((1,1-dimethylethyl)amino)-3-((2-methyl-1H-indol-4-yl)oxy)-, benzoate(ester), (+-)-
62658-63-3
C23-H28-N2-O3

Tissue	Cases Exposure Route	Range	Mean	General Information
11166 Blood, plasma	6 Ingestion	a) 5.5-2.0 ng/ml b) 5.5-2.5 ng/ml	a) Not applicable b) Not applicable	a) 0.5-10 hr, peak (6.5 ng/ml) at 2 hr after 2 mg oral b) 0.5-10 hr, peak (7.0 ng/ml) at 2 hr after 2 mg/d for 12 d. Healthy volunteers, 5 males, 1 female HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; SWITZERLAND; ADULTS; HEART DISEASES; HYPERTENSION; BETA BLOCKER; BIOACCUMULATION; BIOLOGICAL MONITORING; DRUGS Platzer, R.; Galeazzi, R.L.; Niederberger, W.; Rosenthaler, J. 1984 Clinical Pharmacology and Therapeutics 36(1):5-13				

2-Propanol, 1-(isopropylamino)-3-(1-naphthyloxy)- (8 CI); 2-Propanol, 1-((1-methylethyl)amino)-3-(1-naphthalenyloxy)- (9 CI)
525-66-6
C16-H21-N-O2
MW 259.34, MP 96 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11169 Blood, plasma	18 Ingestion	a) Not given b) Not given c) Not given	a) 95+/-22 ng/ml b) 225+/-41 ng/ml c) 426+/-79 ng/ml	a) 120 mg/day b) 240 mg/day c) 360 mg/day Adult, ambulatory patients, 26-65 yr, mild to moderate essential hypertension Reduction in blood pressure, bradycardia, asymptomatic repolarization ECG abnormalities (1 patient) HPLC; Fluorometric detection
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; VASODILATORS; COMPARATIVE EVALUATIONS; BLOOD PRESSURE Halperin, A.K.; Gross, K.M.; Rogers, J.P.; Cubeddu, L.X.; 1984 Clinical Pharmacology and Therapeutics 36(6):750-758				

2-Propanol, 1-(isopropylamino)-3-(1-naphthyloxy)- (8 CI); 2-Propanol, 1-((1-methylethyl)amino)-3-(1-naphthalenyloxy)- (9 CI)
525-66-6
C16-H21-N-O2
MW 259.34, MP 96 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11170 Blood, plasma	6 Injection Rectal	a) 1091-1660 ng.hr/ml b) 256-577 ng.hr/ml c) 28-45 ng/ml d) 16-54 ng/ml e) 38-65 ng/ml f) 17-67 ng/ml	a) 1342+/-210 ng.hr/ml b) 413+/-245 ng.hr/ml c) 36+/-7 ng/ml d) 42+/-15 ng/ml e) 42+/-13 ng/ml f) 50+/-16 ng/ml	a) Area under curve, IV b) Area under curve, rectal c) Steady state metabolites (4 OH-P and 4 OH-P-glucuronide), IV d) Steady state metabolites (40 H-P and 40 H-P-glucuronide), rectal e) steady state P-glucuronide metabolite, IV f) Steady state P-glucuronide metabolite, rectal 24 hr IV dose 0.8 ug/min/kg. 24 hr rectal dose 1.1 ug/min/kg. Rectal route partially avoids first-pass elimination. Healthy volunteers, 22-26 yr old HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; NETHERLANDS; ADULTS; CARDIOVASCULAR DISEASES; BETA BLOCKER; DRUG THERAPY; BIOACCUMULATION; BIOAVAILABILITY; METABOLITES; DRUGS de Leede, L.G.J.; Hug, C.C., Jr.; de Lange, S.; de Boer, A.G.; Breimer, D.D. 1984 Clinical Pharmacology and Therapeutics 35(2):148-155				

Tissue	Cases Exposure Route	Range	Mean	General Information
11171 Blood, plasma	8 Ingestion	22-189 ng/ml	Not given	60 mg 3X/d for 4 d. Measured after morning dose on day 4. Reduction in exercise tachycardia and antipyrine clearance. 20-25 yr old healthy, drug-free volunteers
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; BETA BLOCKER; DRUGS Parker, G.; Daneshmend, T.K.; Roberts, C.J.C.; 1984 Journal of Clinical Pharmacology 24:498-499				

Tissue	Cases Exposure Route	Range	Mean	General Information
11172 Blood, plasma	6 Injection	a) 50-2 ng/ml b) 45-1.5 ng/ml	a) Not given b) Not given	a) At 1 min-10 hr, (-)-enantiomer b) At 1 min-10 hr, (+)-enantiomer Ranges of means 0.1 mg/kg IV. Times and levels estimated from graph. Systemic clearance higher for (+) in all subjects. Greater plasma binding for (-). Normal adults, 21-38 yr, 62-92 kg, no other medication GC/MS
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; BIOAVAILABILITY Olanoff, L.S.; Walle, T.; Walle, K.; Cowart, T.D.; Gaffney, T.E. 1984 Clinical Pharmacology and Therapeutics 35(6):755-761				

2-Propanol, 1-(isopropylamino)-3-(1-naphthyloxy)- (8 CI); 2-Propanol, 1-((1-methylethyl)amino)-3-(1-naphthalenyloxy)- (9 CI)
525-66-6
C16-H21-N-O2
MW 259.34, MP 96 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11175 Blood, plasma	6 Ingestion	26-122 ng/ml	52 +or- 36 ng/ml	Mean steady state levels during 40 mg propranolol/6 hr 24 hr before and 6 hr after 2.5-3.0 mg/kg lidocaine infusion over 10 min. Lidocaine elimination significantly reduced Healthy 22-31 yr old non-smokers Fluorometry
BLOOD PLASMA; ANTIARRHYTHMIC AGENTS; AUTONOMIC DRUGS; DRUG INTERACTION; DRUGS Conrad, K.A.; Byers, J.M., III; Finley, P.R.; Burnham, L. 1983 Clinical Pharmacology and Therapeutics 33(2):183-186				

Tissue	Cases Exposure Route	Range	Mean	General Information
11174 Blood, plasma	6	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 942 ng/ml b) 231 ng/ml c) 299 ng/ml d) 624 ng/ml e) 85 ng/ml f) 200 ng/ml	a) 1280 mg/day b) 800 mg/day c) 720 mg/day d) 1280 mg/day e) 480 mg/day f) 960 mg/day Steady state peaks Propranolol-resistant hospitalized patients Resistance related to excessive protein binding, erythrocyte abnormality, alterations in metabolite levels, reduced beta receptor number, and postreceptor abnormalities. RIA
ADULTS; BLOOD PLASMA; DRUGS; COMPARATIVE EVALUATIONS; AUTONOMIC DRUGS Steinberg, S.F.; Bilezikian, J.P. 1983 Clinical Pharmacology and Therapeutics 33(2):168-171				

Tissue	Cases Exposure Route	Range	Mean	General Information
11175 Blood, plasma	a) 1 b) 3 c) 4 Ingestion	a) 50-1.0 ng/ml b) 210-10.0 ng/ml c) 800-50 ng/ml	a) Not given b) Not given c) Not given	a) 40 mg 2X/d b) 80 mg 2X/d c) 160 mg 2X/d Large variations in individual peak and trough times. Estimated from graph 26-50 yr old, hypertensives, wt 58-99 kg GC
DENMARK; ADULTS; HYPERTENSION; BLOOD PLASMA; URINE; ANTIHYPERTENSIVE AGENTS; DRUG THERAPY; DRUGS Andreasen, F.; Jakobsen, P.; Kornerup, H.J.; Pedersen, E.B.; Pedersen, O.L. 1983 Clinical Pharmacology and Therapeutics 33(1):10-18				

2-Propanol, 1-(isopropylamino)-3-(1-naphthyloxy)- (8 CI); 2-Propanol, 1-((1-methylethyl)amino)-3-(1-naphthalenyloxy)- (9 CI)
525-66-6
C16-H21-N-O2
MW 259.34, MP 96 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11176 Blood, plasma	4 Ingestion	a) 10-15 ng/ml b) 40-70 ng/ml c) 85-210 ng/ml	a) 14 ng/ml b) 51 ng/ml c) 125 ng/ml	a) 80 mg/d b) 240 mg/d c) 320 mg/d Steady state after indicated dose during 15th dosing interval. Dose response not linear. Healthy volunteers, 24-28 yr old, wt 64-82 kg
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DISEASES; HEART DISEASES; HYPERTENSION; ANTIARRHYTHMIC AGENTS; BETA BLOCKER; ANTIHYPERTENSIVE AGENTS; DRUGS; DRUG THERAPY; BIOACCUMULATION; METABOLITES Silber, B.M.; Holford, N.H.G.; Riegelman, S. 1983 Journal of Pharmaceutical Sciences				

Tissue	Cases Exposure Route	Range	Mean	General Information
11177 Blood, plasma	5 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 25+/-7 ng/ml b) 55+/-11 ng/ml c) 153+/-56 ng.hr/ml d) 524+/-66 ng.hr/ml e) 316+/-83 ng/ml f) 414+/-78 ng/ml g) 1577+/-286 ng.hr/ml h) 1471+/-111 ng.hr/ml	a) Peak 2.3+/-0.2 hr after 40 mg b) Peak, 0.8+/-0.1 hr after 40 mg and 50 mg hydralazine c) Area under curve (AUC) 12 hr after 40 mg d) AUC, 12 hr after 40 mg and 50 mg hydralazine e) Naphthoxylactic acid (NLA) metabolite, peak 1.8+/-0.2 hr after 40 mg f) NLA, peak 1.4+/-0.3 hr after 40 mg and 50 mg hydralazine g) NLA, AUC 12 hr after 40 mg h) NLA, AUC 12 hr after 40 mg and 50 mg hydralazine. Healthy volunteers, 29+/-2.2 yr old, wt 77.6+/-4.9 kg HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; HYPERTENSION; ANTIHYPERTENSIVE AGENTS; DRUGS; DRUG THERAPY; DRUG INTERACTION; VASODILATORS; BIOACCUMULATION; METABOLITES Schneck, D.W.; Vary, J.E. 1984 Clinical Pharmacology and Therapeutics 35(4):447-453				

Tissue	Cases Exposure Route	Range	Mean	General Information
11178 Blood, plasma	5 Ingestion	a) 28.6-110.8 ng/ml b) 41.1-125.3 ng/ml c) 7.2-14.4% d) 14.1-20.6%	a) 59.7+/-14.5 ng/ml b) 74.4+/-15.0 ng/ml c) 10.9+/-1.5% d) 15.1+/-1.8%	a) Steady-state, thyrotoxic subjects b) Steady-state, euthyroid subjects c) % unbound, thyrotoxic subjects d) % unbound, euthyriod subjects 80 mg/8 hr for 2 d. Same patients studied in thyrotoxic and euthyroid state. Patient volunteers, 22-68 yr old, 3 females, 2 males HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; HYPERTHYROIDISM; DRUG THERAPY; DRUGS; HORMONES; BIOACCUMULATION Wells, P.G.; Feely, J.; Wilkinson, G.R.; Wood, A.J.J. 1983 Clinical Pharmacology and Therapeutics 33(5):603-608				

2-Propanol, 1-(isopropylamino)-3-(1-naphthyloxy)- (8 CI); 2-Propanol, 1-((1-methylethyl)amino)-3-(1-naphthalenyloxy)- (9 CI)
525-66-6
C16-H21-N-O2
MW 259.34, MP 96 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11179 Blood, plasma	4 Ingestion Vaginal	a) 20-10 ug/l b) 5-68 ug/l	a) Not given b) Not given	a) 30 min and 8 hr after 80 mg orally. Peak 52.2+/-14.3 ug/l at 4.6+/-0.6 hr. Overnight fast prior to dose b) 1 and 8 hr after 80 mg tablet vaginally. Peak 112.0+/-27.9 at 4.6+/-0.71 hg Also using oral contraceptives or IUD. 20-29 (mean 24) yr old healthy non-pregnant volunteers, wt 57-74 (mean 62) kg Small reductions in blood pressure, pulse rate and forced expiratory volume HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; CONTRACEPTIVES Patel, L.C.; Warrington, S.J.; Pearson, R.M. 1983 British Medical Journal 287:1247-1248				

Tissue	Cases Exposure Route	Range	Mean	General Information
11180 Blood, serum	23 Ingestion	a) 89+/-19-167+/-34 ng/ml b) 41+/-10-110+/-21 ng/ml c) 53+/-13-83+/-39 ng/ml S.E.	a) Not given b) Not given c) Not given	a) 0-168 hr, with 5-10 mg IV diazepam b) 0-72 hr, with 2 mg IV lorazepam c) 0-48 hr, with 1 mg oral alprazolam 80 mg 3X/d. Range of means. Overall mean (a)-c)) 100 ng/ml. Healthy adults, 18-28 yr HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ADOLESCENTS; ADULTS; DRUGS; DRUG INTERACTION; BENZODIAZEPINES; ANTIHYPERTENSIVE AGENTS; BETA BLOCKER; COMPARATIVE EVALUATIONS; DIAZEPAMS; METABOLITES Ochs, H.R.; Greenblatt, D.J.; Verburg-Ochs, B. 1984 Clinical Pharmacology and Therapeutics 36(4):451-455				

Tissue	Cases Exposure Route	Range	Mean	General Information
11181 Blood, serum	a) 20 b) 15 Injection Ingestion	a) 225-70 nmol/l b) 150-60 nmol/l	a) Not applicable b) Not applicable	a) 0-48 hr, trough (80 nmol/l) at 7 hr, peak (350 nmol/l) at 32 hr, myocardial infarction patients b) 0-48 hr, peak (200 nmol/l) at 32 hr, chest pain patients 0.1 mg/kg IV dose initially, followed by 40 mg/4 hr for 27 hr oral. Concluded myocardial infarction altered kinetics. Patients with myocardial infarction or chest pains, 42-69 yr old HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; BETA BLOCKER; DRUG THERAPY; BIOACCUMULATION; DRUGS Paxton, J.W.; Norris, R.M. 1984 Clinical Pharmacology and Therapeutics 36(3)337-342				

2-Propanol, 1-(isopropylamino)-3-(1-naphthyloxy)- (8 CI); 2-Propanol, 1-((1-methylethyl)amino)-3-(1-naphthalenyloxy)- (9 CI)
525-66-6
C16-H21-N-O2
MW 259.34, MP 96 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11183 Blood, whole	12 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 91.5+/-42.7 ng/ml b) 90.6+/-36.6 ng/ml c) 127.2+/-46.3 ng/ml d) 10.0+/-2.7 ng/ml e) 11.9+/-4.1 ng/ml f) 12.9+/-4.5 ng/ml	a) Controls b) 300 mg/d ranitidine pretreatment c) 1200 mg/d cimetidine pretreatment d) 4-hydroxy-metabolite, controls e) 4-hydroxy-metabolite, 300 mg/d ranitidine pretreatment f) 4-hydroxy-metabolite, 1200 mg/d cimetidine Peaks, steady-state after 160 mg/d for 4 d. Healthy volunteers, 21-33 yr old (mean 26 yr), wt 62-102 kg (mean 82 kg) HPLC

BLOOD; DELIBERATE EXPOSURE; ADULTS; DRUGS; HYPERTENSION; GASTROINTESTINAL DISEASES; DRUG THERAPY; DRUG INTERACTION; ANTIHYPERTENSIVE AGENTS; ANTACIDS; BIOACCUMULATION; METABOLITES

Dean, K.H.; Powell, J.R.; Rogers, J.P.; Eshelman, F.N. 1984 Journal of Clinical Pharmacology 24:500-508

Tissue	Cases Exposure Route	Range	Mean	General Information
11183 Urine	8 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 0.26+/-0.021 b) 0.29+/-0.050 c) 0.27+/-0.026 d) 0.29+/-0.037 e) 0.11+/-0.018 f) 0.12+/-0.019 g) 0.12+/-0.019 h) 0.16+/-0.026	a) Basic extract (C-14), controls b) Basic extract (C-14), with 50 mg hydralazine c) Acid extract (C-14), controls d) Acid extract (C-14), with 50 mg hydralazine e) Glucuronide metabolite, controls f) Glucuronide metabolite, with 50 mg hydralazine g) Naphthoxylactic acid (NLA) metabolite, controls h) NLA metabolite, with 50 mg hydralazine fraction of 40 mg recovered in 24 hr. Healthy volunteers, 29+/-2.2 yr old, wt 77.5+/-4.9 kg HPLC

BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; HYPERTENSION; ANTIHYPERTENSIVE AGENTS; DRUGS; DRUG THERAPY; DRUG INTERACTION; VASODILATORS; BIOACCUMULATION; METABOLITES

Schaech, D.W.; Vary, J.B. 1984 Clinical Pharmacology and Therapeutics 35(4):447-453

Tissue	Cases Exposure Route	Range	Mean	General Information
11184 Urine	a) 1 b) 5 c) 4 Ingestion	a) Not applicable b) 0.204-0.881 mg c) 1.697-4.420 mg	a) 0.120 mg b) Not given c) Not given	a) 40 mg 2X/d b) 80 mg 2X/d c) 160 mg 2X/d Amounts excreted over 24 hr. 28-59 yr old, hypertensive wt 58-90 kg GC

DENMARK; ADULTS; HYPERTENSION; BLOOD PLASMA; URINE; ANTIHYPERTENSIVE AGENTS; DRUG THERAPY; DRUGS

Andreasen, F.; Jakobsen, P.; Kornerup, H.J.; Pedersen, E.B.; Pedersen, O.L. 1983 Clinical Pharmacology and Therapeutics 33(1):10-18

2-Propanol, 1-(isopropylamino)-3-(1-naphthyloxy)- (8 CI); 2-Propanol, 1-((1-methylethyl)amino)-3-(1-naphthalenyloxy)- (9 CI)
526-66-6
C16-H21-N-O2
MW 259.34, MP 96 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11186 Urine	5 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 11.4+/-2.4% b) 0.8+/-0.4% c) 11.5+/-3.0% d) 0.7+/-0.4% S.E.	a) Metabolite, naphthoxylactic acid, 0-8 hr sample. 0-48 hr cumulative sample was 14.6+/-3.5% b) Metabolite, naphthoxyacetic acid, 0-8 hr sample. 0-48 hr, 0.9+/-0.8% c) Metabolite a) + conjugates 0.8 hr sample. 0-48 hr, 14.8+/-5.7% d) Metabolite b) + conjugates 0.8 hr sample. 0-48 hr, 0.6+/-0.7% % of dose in cumulative samples. 40 mg oral dose as pseudoracemic propranolol. 20-30 yr old males HPLC; GC/MS
URINE; DELIBERATE EXPOSURE; DRUGS; ANTIARRHYTHMIC AGENTS; BETA BLOCKER; METABOLITES Nelson, W.L.; Bartels, M.J. 1984 Drug Metabolism and Disposition 12(3):345-352				

2-Propanol, 1-(1H-indol-4-yloxy)-3-((1-methylethyl)amino)-
13523-86-9
C14-H20-N2-O2
MW 248.32, MP 171-173 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11186 Blood, plasma	7 Ingestion	a) 60-0 ug/l b) 21-0 ug/l c) <1 ug/l	a) Not given b) Not given c) Not given	a) 1 and 24 hr after 10 mg b) 1 and 24 hr after 10 mg. 5 min later, 20 ml ipecac. Vomited 10-25 min later c) 1-24 hr after 400 mg, 5 min later, 50 g activated charcoal in 400 ml water 20 mg metoclopramide (antiemetic) 1 hr before doses. Estimated from graph. 19-29 yr old student volunteers HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; DRUGS; COMPARATIVE EVALUATIONS Neuvonen, P.J.; Olkkola, K.T. 1984 Clinical Toxicology 22(2):103-114				

Tissue	Cases Exposure Route	Range	Mean	General Information
11187 Blood, plasma	9 Ingestion	a) 38-8 ng/ml b) 42-10 ng/ml	a) Not applicable b) Not applicable	a) 0.5-12 hrs, peak (66 ng/ml) at 1.5 hr after 15 mg oral b) 0.5-12 hrs, peak (163 ng/ml) at 1.5 hr after 4 wk regimen of 15 mg/d oral. Healthy medical students or interns, 8 males, 1 female, 21-35 yr old Fluorimetry
BLOOD PLASMA; DELIBERATE EXPOSURE; SWITZERLAND; ADULTS; HYPERTENSION; BETA BLOCKER; DRUG THERAPY; DRUGS; BIOACCUMULATION Galeazzi, R.L.; Pirovino, M.; Weidmann, P. 1983 Clinical Pharmacology and Therapeutics 33(6):735-742				

2-Propanol, 1-(1H-indol-4-yloxy)-3-((1-methylethyl)amino)-
13523-86-9
C14-H20-N2-O2
MW 248.32, MP 171-173 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11188 Urine	7 Ingestion	a) Not given b) Not given c) Not given	a) 2.74+/-0.46 mg b) 1.22+/-0.34 mg c) <0.02 mg	a) Total for 48 hr after 10 mg b) Total for 48 hr after 10 mg, 5 min later, 20 ml ipecac. Vomited 10-25 min later c) Total for 48 hr after 10 mg, 5 min later 50 g activated charcoal in 400 ml water 20 mg metoclopramide (antiemetic) 1 hr before doses. 19-20 yr old student volunteers HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; DRUGS; COMPARATIVE EVALUATIONS Neuvonen, P.J.; Olkkola, K.T. 1984 Clinical Toxicology 22(2):103-114				

2-Propanol, 1-(2-cyclopentylphenoxy)-3-((1,1-dimethylethyl)amino)-
36507-48-9
C18-H29-N-O2
MW 291.4

Tissue	Cases Exposure Route	Range	Mean	General Information
11189 Blood, plasma	1 Ingestion	Not applicable	a) 584 ug/L b) 1.3 mg/L c) 160 ug/L d) 92 ug/L	a) Penbutolol, 0.67 hr b) Penbutolol glucuronide, 3 hr c) 4-hydroxypenbutolol, 1 hr d) 4-hydroxypenbutolol glucuronides, 2 hr Peak level and time after 40 mg as sulfate. b)-d) metabolites of a) Healthy adult HPLC
11190 Urine	1 Ingestion	Not applicable	a) 9 mg b) 8.1 mg	a) Penbutolol glucuronide b) 4-hydroxypenbutolol Cumulative excretion 0-120 hr after 40 mg dose as sulfate. Estimated from graph. Healthy adult HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; BETA BLOCKER; COMPARATIVE EVALUATIONS; MEASUREMENT METHODS Miner, D.J.; Binkley, D.A.; Bechtol, L.D. 1984 Clinical Chemistry 30(5):717-723				

2-Propanol, 1-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)-3-((1-methylethyl)amino)-
63659-18-7
C18-H29-N-O3

Tissue	Cases Exposure Route	Range	Mean	General Information
11191 Blood	10 Injection Ingestion	a) 4.76-12.06 l/hr/sq m b) 55.0-135.0 Ng/ml	a) 7.90+/-0.68 l/hr/sq m b) 97.4+/-7.6 Ng/ml	a) Clearance after 20 mg/1.73 sq m, IV b) Maximum concentration after same dose administered as 2.5 mg/ml, oral solution Half-lives (19.9+/-1.7 hr, IV and 19.4+/-2.7 hr, oral) were same. Judged to have antihypertensive effect. Children, 5-13 yr old, with chronic renal hypertension and mild to severe renal failure GC
BLOOD; DELIBERATE EXPOSURE; ITALY; CHILDREN; HYPERTENSION; KIDNEY DISEASES; ANTIHYPERTENSIVE AGENTS; BIOACCUMULATION; BIOAVAILABILITY; BIOLOGICAL MONITORING Palmieri, R.; Assael, B.M.; Bianchetti, G.; Gomeni, R.; Claris-Appiani, A.; Edefonti, A.; Morselli, P.L. 1984 Clinical Pharmacology and Therapeutics 35(2):141-147				

2-Propanol, 1-(4-(2-methoxyethyl)phenoxy)-3-((1-methylethyl)amino)-, (+-)-
37350-58-6
C15-H25-N-O3
MW 267.38

Tissue	Cases Exposure Route	Range	Mean	General Information
11192 Bile	1 Ingestion	Not given	254.0 mg/L	Level in postmortem specimen. 40 yr old, died 10 hr after hospital admission Marked hypotension and bradycardia. History of hypertension and ethanol abuse. GC/MS; HPLC
11193 Blood	1 Ingestion	Not given	4.7 mg/L	Level in postmortem specimen. Considerably lower than published overdoses. May be due to intensive resuscitation efforts. Therapeutic levels 0.02-0.34 mg/L 40 yr old, died 10 hr after hospital admission Marked hypotension and bradycardia. History of hypertension and ethanol abuse. GC/MS; HPLC
BLOOD; URINE; BILE; SPINAL FLUID; VITREOUS HUMOR; PLEURAL FLUID; LIVER; KIDNEYS; DELIBERATE EXPOSURE; AUTOPSIES; CASE HISTORIES; SUICIDE; HYPERTENSION; ANTIHYPERTENSIVE AGENTS; BETA BLOCKER; DRUGS; FORENSIC MEDICINE; MEASUREMENT METHODS; BLOOD PRESSURE Stajic, M.; Granger, R.H.; Beyer, J.C. 1984 Journal of Analytical Toxicology 81:228-230				

Tissue	Cases Exposure Route	Range	Mean	General Information
11194 Blood, plasma	6 Ingestion	22-75 ng/ml	45+/-18 ng/ml	Mean steady state levels during 50 mg metoprolol/6 hr for 24 hr before and 8 hr after 2.5-3.0 mg/kg lidocaine infusion over 10 min. Lidocaine elimination significantly reduced Healthy 22-31 yr old non-smokers GC
BLOOD PLASMA; ANTIARRHYTHMIC AGENTS; AUTONOMIC DRUGS; DRUG INTERACTION; DRUGS Conrad, K.A.; Byers, J.M., III; Finley, P.R.; Burnham, L. 1983 Clinical Pharmacology and Therapeutics 33(2):133-138				

2-Propanol, 1-(4-(2-methoxyethyl)phenoxy)-3-((1-methylethyl)amino)-, (+-)-
37350-58-6
C15-H25-N-O3
MW 267.36

Tissue	Cases Exposure Route	Range	Mean	General Information
11195 Blood, plasma	16 Ingestion	a) 90-10 nmol/l b) 110-60 nmol/l c) 210-75 nmol/l d) 160-100 nmol/l	a) Not given b) Not given c) Not given d) Not given	a) 1 and 12 hr after 25 mg 2X/day, day 4 of continuous treatment, 20 nmol/l at 0 hr, 10 elderly subjects b) alpha-OH-metabolite 1 and 12 hr after metoprolol dose, 50 nmol/l at 0 hr, elderly subjects c) 2 and 7 hr after 50 mg 2X/day, day 4 of continuous treatment, 40 nmol/l at 0 hr, 5 young subjects d) Alpha-OH-metabolite 2 and 7 hr after metoprolol dose, 70 nmol/l at 0 hr, young subjects Estimated from graph 71-74 yr olds, wt 58-81 kg, non-smokers and young controls, Gothenberg, Sweden No effect of age on drug disposition. Systemic availability somewhat lower in elderly subjects. GC/MS
SWEDEN; ADULTS; AGE; CARDIOVASCULAR DISEASES; BLOOD PLASMA; DRUGS; COMPARATIVE EVALUATIONS; AUTONOMIC DRUGS; ANTIHYPERTENSIVE AGENTS Regardh, C.G.; Larsson, M.; Landahl, S.; Lundborg, P.; Steen, B.; Hoffmann, K.-J.; Lagerstrom, P.-O. 1983 European Journal of Clinical Pharmacology 24:221-226				

Tissue	Cases Exposure Route	Range	Mean	General Information
11196 Blood, plasma	5 Ingestion	a) 260-700 nM b) 75-145 nM c) 80-200 nM d) 5-46 nM	a) Not given b) Not given c) Not given d) Not given	a) Peak, 0.5-2.0 hr, 3-5 mo after delivery b) Peak, 0.5-2.0 hr, during last trimester c) At 4 hr, 3-5 mo after delivery d) At 4 hr, during last trimester After 100 mg. Oral clearance was 4.4 times higher during pregnancy. Pregnant women, 26-28 yr, 63.5-100 kg GC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; ANTIHYPERTENSIVE AGENTS; COMPARATIVE EVALUATIONS; BETA BLOCKER; PREGNANCY Hegstedt, S.; Lindberg, B.; Rane, A. 1983 European Journal of Clinical Pharmacology 24:217-220				

Tissue	Cases Exposure Route	Range	Mean	General Information
11197 Blood, plasma	8 Ingestion	160-750 ng/ml	Not given	100 mg 3X/d for 4 d. Measured after morning dose on day 4. Reduction in exercise tachycardia and antipyrine clearance. 20-25 yr old healthy, drug-free volunteers
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; BETA BLOCKER; DRUGS Parker, G.; Daneshmend, T.K.; Roberts, C.J.C.; 1984 Journal of Clinical Pharmacology 24:493-499				

2-Propanol, 1-(4-(2-methoxyethyl)phenoxy)-3-((1-methylethyl)amino)-, (+-)-
37350-58-6
C15-H25-N-O3
MW 267.36

Tissue	Cases Exposure Route	Range	Mean	General Information
11100 Blood, serum	5 Ingestion	a) 22-150 ng/ml b) 30-60 ng/ml	a) Not given b) Not given	a) 0 and 1 hr after 75 mg dose, end of wk 3. Level 53 ng/ml at 7 hr b) Metabolite, a-hydroxymetoprolol 0 and 2 hr after dose. Level 46 ng/ml at 7 hr Dosage regimen 25 mg 2/d for wk 1, 50 mg 2/d for wk 2, and 75 mg 2/d for wk 3. Reductions in tremor related to levels of drug and metabolite. Ranges of means, estimated from figure. 18-59 yr old patients with essential tremor HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; NEUROLOGIC MANIFESTATIONS; BETA BLOCKER; DRUGS; METABOLISM; DRUG THERAPY Gengo, F.M.; Ulatowski, J.A.; McHugh, W.B. 1984 Clinical Pharmacology and Therapeutics 36(3):320-326				

Tissue	Cases Exposure Route	Range	Mean	General Information
11109 Kidney	1 Ingestion	Not given	7.1 mg/kg	Level in postmortem specimen. Considerably lower than published overdoses. May be due to intensive resuscitation efforts. 40 yr old, died 10 hr after hospital admission Marked hypotension and bradycardia. History of hypertension and ethanol abuse. GC/MS; HPLC
11200 Liver	1 Ingestion	Not given	6.3 mg/kg	Level in postmortem specimen. Considerably lower than published overdoses. May be due to intensive resuscitation efforts. 40 yr old, died 10 hr after hospital admission Marked hypotension and bradycardia. History of hypertension and ethanol abuse. GC/MS; HPLC
11301 Pleural fluid	1 Ingestion	Not given	3.9 mg/L	Level in postmortem specimen. Considerably lower than published overdoses. May be due to intensive resuscitation efforts. 40 yr old, died 10 hr after hospital admission Marked hypotension and bradycardia. History of hypertension and ethanol abuse. GC/MS; HPLC
11302 Spinal fluid	1 Ingestion	Not given	32.0 mg/L	Level in postmortem specimen. Considerably lower than published overdoses. May be due to intensive resuscitation efforts. 40 yr old, died 10 hr after hospital admission Marked hypotension and bradycardia. History of hypertension and ethanol abuse. GC/MS; HPLC

(next page)

2-Propanol, 1-(4-(2-methoxyethyl)phenoxy)-3-((1-methylethyl)amino)-, (+-)-
37350-58-6
C15-H25-N-O3
MW 267.36

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
11208 Urine	1 Ingestion	Not given	194.0 mg/L	Level in postmortem specimen. Considerably lower than published overdoses. May be due to intensive resuscitation efforts. 49 yr old, died 10 hr after hospital admission Marked hypotension and bradycardia. History of hypertension and ethanol abuse. GC/MS; HPLC
11204 Vitreous humor	1 Ingestion	Not given	8.3 mg/L	Level in postmortem specimen. Considerably lower than published overdoses. May be due to intensive resuscitation efforts. 49 yr old, died 10 hr after hospital admission Marked hypotension and bradycardia. History of hypertension and ethanol abuse. GC/MS; HPLC
BLOOD; URINE; BILE; SPINAL FLUID; VITREOUS HUMOR; PLEURAL FLUID; LIVER; KIDNEYS; DELIBERATE EXPOSURE; AUTOPSIES; CASE HISTORIES; SUICIDE; HYPERTENSION; ANTIHYPERTENSIVE AGENTS; BETA BLOCKER; DRUGS; FORENSIC MEDICINE; MEASUREMENT METHODS; BLOOD PRESSURE Stajic, M.; Granger, R.H.; Beyer, J.C. 1984 Journal of Analytical Toxicology 81:228-230				

2-Propen-1-amine, 3-(4-bromophenyl)-N,N-dimethyl-3-(3-pyridinyl)-, (Z)-
56775-88-3
C16-H17-Br-N2
MW 317.25

Tissue	Cases Exposure Route	Range	Mean	General Information
11206 Bile	1 Ingestion	a) Not applicable b) Not applicable	a) 1.4 (free), 3.8 (total) mg/L b) 5.3 (free), 16 (total) mg/L	a) Zimelidine b) Metabolite, norzimelidine At autopsy. Known medication was 100 mg/d, (also methyprylon, oxazepam, tetracycline). Normal therapeutic levels range from 0.02-0.25 mg/L, report of overdose survivor after 12 hr was 0.6 mg/L. 30 yr old female under psychiatric care, death from self-inflicted gunshot wound. GC/MS
11206 Blood	1 Ingestion	a) Not applicable b) Not applicable	a) 0.71 mg/L b) 2.2 mg/L	a) Zimelidine b) Metabolite, norzimelidine At autopsy. Known medication was 100 mg/d, (also methyprylon, oxazepam, tetracycline). Normal therapeutic levels range from 0.02-0.25 mg/L, report of overdose survivor after 12 hr was 0.6 mg/L. 30 yr old female under psychiatric care, death from self-inflicted gunshot wound. GC/MS
DRUGS; DELIBERATE EXPOSURE; AUTOPSIES; SUICIDE; BLOOD; URINE; BRAIN; BILE Semple, D.J. 1984 Journal of Analytical Toxicology 8:285-287				

2-Propen-1-amine, 3-(4-bromophenyl)-N,N-dimethyl-3-(2-pyridinyl)-, (Z)-
54775-88-3
C16-H17-Br-N2
MW 317.25

Tissue	Cases Exposure Route	Range	Mean	General Information
11207 Blood, plasma	2 Ingestion	a) 4.8-0.9 mg/l b) 1.1-1.0 mg/l c) 4.7-0.35 mg/l d) 2.0-1.0 mg/l	a) Not given b) Not given c) Not given d) Not given	a) 4 and 15 hr after 2.5 g zimeldine and 6 pt beer. 32 yr old male b) Metabolite, norsimeldine 4 and 15 hr. Trough 0.8 mg at 12 hr. Same case c) 4 and 24 hr after 2 g. 37 yr old female. 100 mg/d for several mo prior d) Metabolite, norsimeldine 4 and 24 hr. Same case as c) Each had one seizure 4.5-5 hr after ingestion. Values estimated from graph. Overdose patients Convulsions GLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; ANTIDEPRESSIVE AGENTS; DRUGS; ALCOHOLS; DRUG ABUSE Chapman, B.J.; Proudfoot, A.T.; Dawling, S. 1983 British Medical Journal 287:1672-1673				

Tissue	Cases Exposure Route	Range	Mean	General Information
11208 Blood, serum	6 Ingestion	a) 10-50 ng/ml b) 10-50 ng/ml c) 10-60 ng/ml d) 10-70 ng/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 0.5-8 hr, peak (230 ng/ml) at 1.5 hr. b) With ethanol treatment (to maintain 800-1000 mg/ml in blood), (BAC), 0.5-8 hr, peak (275 ng/ml) at 3 hr c) Norsimelidine metabolite, 0.5-8 hr, peak (80 ng/ml) at 1.5 hr d) With ethanol treatment (800-1000 mg/ml BAC), 0.5-8 hr, peak (80 ng/ml) at 3 hr 200 mg dose. Ethanol decreased rate of metabolism by 46%. Area under curves of parent and metabolite over 8 hr not altered. Healthy volunteers, 20-37 yr old GC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; CANADA; BEHAVIOR DISORDERS; ANTIDEPRESSIVE AGENTS; DRUG INTERACTION; DRUGS; ALCOHOLS; BIOACCUMULATION; ALCOHOLIC BEVERAGES; METABOLITES Naranjo, C.A.; Sellers, E.M.; Kaplan, H.L.; Hamilton, C.; Khouw, V. 1984 Clinical Pharmacology and Therapeutics 36(5):654-660				

Tissue	Cases Exposure Route	Range	Mean	General Information
11209 Brain	1 Ingestion	a) Not applicable b) Not applicable	a) 0.77 mg/kg b) 3.7 mg/kg	a) Zimelidine b) Metabolite, norsimelidine At autopsy. Known medication was 100 mg/d, (also methyprylon, oxazepam, tetracycline). Normal therapeutic levels range from 0.02-0.25 mg/L, report of overdose survivor after 12 hr was 0.6 mg/L. 30 yr old female under psychiatric care, death from self-inflicted gunshot wound. GC/MS

(next page)

2-Propen-1-amine, 3-(4-bromophenyl)-N,N-dimethyl-3-(3-pyridinyl)-, (Z)-
56775-88-3
C16-H17-Br-N2
MW 317.25

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
11210 Liver	1 Ingestion	a) Not applicable b) Not applicable	a) 24 mg/kg b) 6.2 mg/kg	a) Zimelidine b) Metabolite, norzimelidine At autopsy. Known medication was 100 mg/d, (also methyprylon, oxazepam, tetracycline). Normal therapeutic levels range from 0.02-0.25 mg/L, report of overdose survivor after 12 hr was 0.6 mg/L. 30 yr old female under psychiatric care, death from self-inflicted gunshot wound. GC/MS
11211 Urine	1 Ingestion	a) Not applicable b) Not applicable	a) 1.5 mg/L b) 11 mg/L	a) Zimelidine b) Metabolite, norzimelidine At autopsy. Known medication was 100 mg/d, (also methyprylon, oxazepam, tetracycline). Normal therapeutic levels range from 0.02-0.25 mg/L, report of overdose survivor after 12 hr was 0.6 mg/L. 30 yr old female under psychiatric care, death from self-inflicted gunshot wound. GC/MS
DRUGS; DELIBERATE EXPOSURE; AUTOPSIES; SUICIDE; BLOOD; URINE; BRAIN; BILE Semple, D.J. 1984 Journal of Analytical Toxicology 8:265-267				

2-Pyridineacetamide, alpha-(2-(bis(1-methylethyl)amino)ethyl)-alpha-phenyl-, phosphate (1:1)
22060-80-5
C21-H29-N2-O.H3-O4-P
MW 427.52

Tissue	Cases Exposure Route	Range	Mean	General Information
11212 Blood, serum	10 Injection	2.30+/-1.16-3.30+/-0.72 ug/ml	Not applicable	0.5-16 hrs, peak (3.7+/-1.01 ug/ml) at 3 hr after 3 0.5 mg/kg boluses and 1 mg/kg/hr infusion for 3 hr. Premature ventricular contractions decreased by 60% with therapy. Patients with ventricular arrhythmia
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; HYPERTENSION; CARDIOVASCULAR DISEASES; ANTIHYPERTENSIVE AGENTS; ANTIARRAYTHMIC AGENTS; BIOACCUMULATION; DRUGS; DRUG THERAPY Reddy, C.P.; Bonce, J.; Bech, B. 1984 Clinical Pharmacology and Therapeutics 35(5):610-616				

2-Pyridineacetamide, alpha-(2-(diisopropylamino)ethyl)-alpha-phenyl- (8 CI); 2-Pyridineacetamide, alpha-(2-(bis(1-methylethyl)amino)ethyl)-alpha-phenyl- (9 CI)
3737-09-5
C21-H29-N3-O
MW 339.47, MP 94.5-95.0 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11218 Blood	1	Not applicable	35 mg/l	Single-drug death, 1975-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS				
Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:226-230				

Tissue	Cases Exposure Route	Range	Mean	General Information
11214 Blood, plasma				Review of the clinical pharmacology of antiarrhythmic agents, including metabolites, protein binding, monitoring of plasma levels, and effects of drug interactions.
ANTIARRHYTHMIC AGENTS; DRUG THERAPY; DRUGS; DELIBERATE EXPOSURE; BLOOD PLASMA; REVIEW				
Woosley, R.L.; Cerskus, I.; Roden, D.M. 1984 Journal of Clinical Pharmacology 24:295-305				

Tissue	Cases Exposure Route	Range	Mean	General Information
11215 Blood, plasma	19 Ingestion	a) 10.2+/-0.5-5.6+/-0.5 umol/l b) 10.1+/-0.9-5.7+/-0.5 umol/l S.E.	a) Not given b) Not given	a) About 1.7 and 8 hr after 200 mg capsule (Durbis) taken 3X/d, on d 14 b) About 3.4 and 12 hr after 300 mg CR tablet, as phosphate (Dirytmin, Durules), taken twice daily, on d 14 Ranges of means. All patients studied in a), then b). Mean pre-dose levels 5.8+/-0.5-6.6+/-0.7 umol/l (S.E.) after several weeks treatment with CR tablets. Concurrent levels of major metabolite, N-deisopropyldisopyramide, 1.7+/-0.3-2.1+/-0.2 umol/l (S.E.). 49-71 yr old patients with atrial or ventricular arrhythmias, Skovde Central Hospital Side-effects (of both formulations), mostly anticholinergic, in 17 cases. 3 patients withdrawn, or had dose reduced, after 4 wk LC
BLOOD PLASMA; DELIBERATE EXPOSURE; SWEDEN; HEART DISEASES; ANTIARRHYTHMIC AGENTS; COMPARATIVE EVALUATIONS; DRUG THERAPY; DRUGS; METABOLITES				
Arnman, K.; Graffner, C.; Rikner, L.; Ryden, L.; Voog, L. 1983 European Journal of Clinical Pharmacology 24:199-203				

2-Pyridineacetamide, alpha-(2-(diisopropylamino)ethyl)-alpha-phenyl- (8 CI); 2-Pyridineacetamide, alpha-(2-(bis(1-methylethyl)amino)ethyl)-alpha-phenyl- (9 CI)
3737-09-5
C21-H29-N3-O
MW 339.47, MP 94.5-95.0 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11216 Blood, serum	a) 10 b) 10 Ingestion	a) 1.40+/-0.26-3.96+/-0.56 ug/ml b) 1.60+/-0.42-4.57+/-0.70 ug/ml	a) 2.9+/-1.0 ug/ml b) 3.2+/-1.0 ug/ml	a) Steady-state, 100 mg/6 hr for 10 d b) Steady-state, 200 mg/6 hr for 10 d Suppression of ventricular premature contractions was positively correlated ($p<0.01$) with steady state levels. Patients with ventricular ectopic activity in excess of 50 beats/hr, 45-65 yr old GC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; DRUG THERAPY; ANTIARRHYTHMIC AGENTS; BIOACCUMULATION; DRUGS Ueda, C.T.; Dzindzio, B.S.; Vesib, W.M. 1984 Clinical Pharmacology and Therapeutics 36(3):326-336				

2-Pyridinemethanol, alpha-(3-(2,6-dimethyl-1-piperidinyl)propyl)-alpha-phenyl-, cis-(+-)-
68252-19-7
C22-H30-N2-O

Tissue	Cases Exposure Route	Range	Mean	General Information
11217 Blood, plasma	12 Injection	2.17-6.15 ug/ml	3.11+/-1.62 ug/ml	Peak after 150 mg IV as HCl. 0.25 ug/ml at 24 hr. 60.3 yr old patients Chronic premature ventricular complexes HPLC
11218 Urine	12 Injection	16-41%	31+/-8%	150 mg IV. Cumulative 54 hr excretion of unchanged drug. Estimated from graph for representative patient. 60.3 yr old patients Chronic premature ventricular complexes HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; HEART DISEASES; DRUGS; ANTIARRHYTHMIC AGENTS; DRUG THERAPY Sanders, S.W.; Nappi, J.M.; Polts, R.L.; Lutz, J.R.; Anderson, J.L. 1983 Journal of Clinical Pharmacology 23:113-122				

2-Thiophenacetic acid, 5-benzoyl-alpha-methyl-
33005-95-7
C14-H12-O3-S

Tissue	Cases Exposure Route	Range	Mean	General Information
11219 Blood, serum	12 Ingestion	Not given	2.85+/-1.94 ug/ml	14 hr after last dose. 200 mg 3x/d for 10 d, coadministered with 0.25 mg digoxin 2x/d. Healthy volunteers, mean age 32+/-9.8, wt 59.1+/-7.8 kg, ht 163.3+/-6.8 cm Gastrointestinal upset in one HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ANTIINFLAMMATORY AGENTS; DRUG INTERACTION; DRUGS Doering, V.W.; Isbary, J. 1983 Arzneimittel-Forschung/Drug Research 33(1)1:167-168				

2,2-Naphthalenediol, 5-(2,((1,1-dimethylethyl)amino)-2-hydroxypropoxy)-1,2,3,4-tetrahydro-
42200-33-9
C17-H27-N-O4
MW 160.18, MP 163.5-164 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11230 Blood, plasma	5 Ingestion	81-300 ng/ml	Not given	40 mg 3X/d for 4 d. Measured after morning dose on day 4. Reduction in exercise tachycardia and antipyrine clearance. 20-25 yr old healthy, drug-free volunteers
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; BETA BLOCKER; DRUGS				
Parker, G.; Daneshmend, T.K.; Roberts, C.J.C.; 1984 Journal of Clinical Pharmacology 24:408-409				

Tissue	Cases Exposure Route	Range	Mean	General Information
11231 Blood, plasma	8 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 146+/-15 ng/ml b) 105+/-7 ng/ml c) 397+/-52 ng/ml d) 2455+/-155 ng/ml e) 1855+/-123 ng/ml f) 2430+/-371 ng/ml	a) Peak, control b) Peak, activated charcoal c) Peak, antibiotics d) Area under curve (AUC), control e) AUC, activated charcoal f) AUC, antibiotics 80 mg parent drug, 3 g charcoal over 9 hr 0.5 erythromycin base and 0.5 g neomycin q.i.d. for 2 d prior to parent drug. Healthy volunteers, 4 males, 4 females, 18-23 yr old Fluorimetry
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; HYPERTENSION; HEART DISEASES; CARDIOVASCULAR DISEASES; ANTIARRHYTHMIC AGENTS; ANALGESICS; DRUGS; DRUG THERAPY; BIOACCUMULATION				
du Souich, P.; Caille, G.; Larochelle, P. 1983 Clinical Pharmacology and Therapeutics 33(5):585-590				

Tissue	Cases Exposure Route	Range	Mean	General Information
11232 Blood, serum	6 Ingestion	a) 42.7+/-12.7-7.2+/-1.0 ng/ml b) 34.7+/-8.0-5.2+/-0.9 ng/ml c) 55.8+/-12.3-8.4+/-1.7 ng/ml d) 46.4+/-9.0-6.7+/-1.5 ng/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 0-48 hrs, peak (147.8+/-30.3 ng/ml) 3 hr after 80 mg tablet b) 0-48 hr, peak (120.6+/-27.6 ng/ml) 3 hr after 80 mg tablet and 80 mg, deuterated, solution c) 0-48 hr, peak (165.4+/-40.0 ng/ml) 3 hr after 80 mg solution d) 0-48 hr, peak (140.3+/-33.0 ng/ml) 4 hr after 80 mg solution and 80 mg deuterated solution. Healthy volunteers GC/MS
11233 Urine	6 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 12.14+/-1.23% b) 9.70+/-0.95% c) 13.44+/-1.57% d) 10.26+/-1.41%	a) 80 mg tablet b) 80 mg tablet and 80 mg, deuterated, solution c) 80 mg solution d) 80 mg solution and 80 mg deuterated solution % dose excreted in 48 hr. Healthy volunteers GC/MS
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; HEART DISEASES; HYPERTENSION; BETA BLOCKER; DRUG THERAPY; DRUGS; MEASUREMENT METHODS; BIOACCUMULATION; RADIONUCLIDES				
Cohen, A.I.; Devlin, R.G.; Ivashkiv, E.; Funke, P.T.; McCormick, T. 1984 Journal of Pharmaceutical Sciences 73(11):1571-1575				

2,3-Naphthalenediol, 5-(2,((1,1-dimethylethyl)amino)-3-hydroxypropoxy)-1,2,3,4-tetrahydro-
42200-33-9
C17-H27-N-O4
MW 160.18, MP 163.5-164 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11224 Urine	6 Ingestion	a) Not given b) Not given c) Not given	a) 15.4+/-1.6% b) 10.2+/-0.7% c) 13.7+/-1.7%	a) Control b) 5 g activated charcoal over 9 hrs plus parent drug c) Antibiotics for 2 d, parent drug % 80 mg dose recovered in 96 hr. Healthy volunteers, 4 males, 4 females, 18-28 yr old Fluorimetry
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; HYPERTENSION; HEART DISEASES; CARDIOVASCULAR DISEASES; ANTIARRHYTHMIC AGENTS; ANALGESICS; DRUGS; DRUG THERAPY; BIOACCUMULATION du Souich, P.; Caille, G.; Larochelle, P. 1985 Clinical Pharmacology and Therapeutics 38(5):585-590				

2,4(1H,3H)-Quinazolinedione, 3-(2-(4-(4-fluorobenzoyl)-1-piperidinyl)ethyl)-
74050-98-9
C22-H22-F-N3-O3

Tissue	Cases Exposure Route	Range	Mean	General Information
11225 Blood, plasma	6 Ingestion Injection	a) 200-5 ug/l b) 12.5-1.3 ug/l	a) Not given b) Not given	a) 45 min and 36 hr after 40 mg oral dose. Level 11 ug/l at 15 min b) 10 min and 36 hr after 0.15 mg/kg IV Ranges of means. Crossover study. High variability in bioavailability after oral dose. Some values and time points estimated from figure. Healthy 20-30 yr olds Sedation and nasal congestion in some subjects after IV. Nasal congestion, mouth dryness, and diuretic effect in some after oral dosage HPLC
11226 Urine	6 Injection	a) Not given b) Not given	c) 1.6+/-0.9% b) 1.2+/-0.6%	a) Recovery of unchanged drug during 24 hr b) During 24-48 hr After 0.15 mg/kg IV. Data on clearance indicate a partly flow dependent hepatic elimination. Healthy 20-30 yr olds HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ANTIHYPERTENSIVE AGENTS; DRUGS; METABOLISM Reimann, I.W.; Obonkwo, P.O.; Klotz, U. 1985 European Journal of Clinical Pharmacology 28:73-76				

2,4-Piperidinedione, 3,3-diethyl-5-methyl-
125-64-4
C10-H17-N-O2
MW 183.26, MP 74-77 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11227 Bile	1 Ingestion	a) Not applicable b) Not applicable	17 mg/L (free)	At autopsy. Known medication was 100 mg/d zimelidine, unstated amounts methyprylon, oxazepam and tetracycline. 30 yr old female under psychiatric care, death from self-inflicted gunshot wound. GC/MS
11226 Blood	1 Ingestion	a) Not applicable b) Not applicable	14 mg/L	At autopsy. Known medication was 100 mg/d zimelidine, unstated amounts methyprylon, oxazepam and tetracycline. 30 yr old female under psychiatric care, death from self-inflicted gunshot wound. GC/MS
DRUGS; DELIBERATE EXPOSURE; AUTOPSIES; SUICIDE; BLOOD; URINE; BRAIN; BILE Semple, D.J. 1984 Journal of Analytical Toxicology 8:285-287				

Tissue	Cases Exposure Route	Range	Mean	General Information
11228 Blood	a) 6 b) 1 Ingestion	a) 0.5-7.6 mg/dL b) Not applicable	a) Not given b) 11.7 mg/dL	a) Non-fatal suicides at admission b) Fatal suicides, postmortem No other drugs involved. 20-94 yr olds attempting suicides 1/75-5/83 University of California Medical Center, San Diego Coma, hypotension, respiratory depression, tachycardia, and pupillary abnormalities in some GLC; Spectrophotometry
BLOOD; DELIBERATE EXPOSURE; ADULTS; SUICIDE; DRUG ABUSE; DRUGS; HYPNOTICS; SEDATIVES; FORENSIC MEDICINE Bailey, D.N.; Shaw, R.F. 1985 Journal of Toxicology-Clinical Toxicology 20(2):133-145				

Tissue	Cases Exposure Route	Range	Mean	General Information
11380 Brain	1 Ingestion	a) Not applicable b) Not applicable	12 mg/kg	At autopsy. Known medication was 100 mg/d zimelidine, unstated amounts methyprylon, oxazepam & tetracycline. 30 yr old female under psychiatric care, death from self-inflicted gunshot wound. GC/MS
11381 Liver	1 Ingestion	a) Not applicable b) Not applicable	41 mg/kg	At autopsy. Known medication was 100 mg/d zimelidine, unstated amounts methyprylon, oxazepam & tetracycline. 30 yr old female under psychiatric care, death from self-inflicted gunshot wound. GC/MS

(next page)

2,4-Piperidinedione, 3,3-diethyl-5-methyl-
125-64-4
C10-H17-N-O2
MW 183.26, MP 74-77 C

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
11282 Urine	1 Ingestion	a) Not applicable b) Not applicable	100 mg/L	At autopsy. Known medication was 100 mg/d simelidine, unstated amounts methyprylon, oxazepam & tetracycline. 30 yr old female under psychiatric care, death from self-inflicted gunshot wound. GC/MS
DRUGS; DELIBERATE EXPOSURE; AUTOPSIES; SUICIDE; BLOOD; URINE; BRAIN; BILE Semple, D.J. 1984 Journal of Analytical Toxicology 8:285-287				

2,4-Pyrimidinediamine, 5-((3,5-dimethoxy-4-(methylthio)phenyl)methyl)-
68002-57-8
C14-H18-N4-O2-S
MW 171.22, MP 126-127 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11283 Blood, plasma	a) 2 b) 4 c) 8 Ingestion	a) 1.44-6 mg/l b) 1.61+/-0.2-0 mg/l c) 2.1+/-0.2-0.4 mg/l	a) Not given b) Not given c) Not given	a) About 2 and 56 hr after 100 mg dose, in healthy subjects b) About 2 and 72 hr after 100 mg, elderly subjects c) About 2 and 72 hr after 100 mg, patients Other pharmacokinetic data presented. Some values and time points estimated from figure. Healthy subjects, volunteers with slightly impaired kidney function, and patients with reduced renal function. Mean ages about 25, 70, and 60 respectively HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; AGE; INFECTION; ANTIBIOTICS; DRUGS; METABOLISM Vergin, H.; Bishop-Freudling, G.B.; Kaiser, W.; Kohler, M.; Strobel, K.; Reutter, F.W. 1983 Antimicrobial Agents and Chemotherapy 24(2):190-193				

2,6-Methano-3-benzazocin-8-ol, 1,2,3,4,5,6-hexahydro-6,11-dimethyl-3-(3-methyl-2-butenyl)-, (2alpha,6alpha,11R*)-
359-83-1
C19-H27-N-O
MW 285.44, MP 145.4-147.2 C (crystals from methanol and water)

Tissue	Cases Exposure Route	Range	Mean	General Information
11284 Blood	a) 4 b) 8 c) 3	a) 3.4-21 mg/l b) 0.2-7.3 mg/l c) 0.4-0.9 mg/l	a) 11.2 mg/l b) 1.4 mg/l c) 0.60+/-0.26 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple drug related deaths 1979-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

2,6-Methano-3-benzazocin-8-ol, 1,2,3,4,5,6-hexahydro-6,11-dimethyl-3-(3-methyl-2-butenyl)-, (2alpha,6alpha,11R*)-
359-83-1
C19-H27-N-O
MW 285.44, MP 145.6-147.2 C (crystals from methanol and water)

Tissue	Cases Exposure Route	Range	Mean	General Information
11285 Blood, plasma	20 Ingestion	a) 1.6-15.5 ng/ml b) 6.5-20.0 ng/ml	a) Not applicable b) Not applicable	a) Tablets, peak 50.0+/-34.3 ng/ml at 1.74+/-1.32 hr b) Solution, peak 79.3+/-61.1 ng/ml at 1.06+/-0.65 hr 0.25-7 hr, dose for each 50 mg pentazocine and 1300 mg acetaminophen. Bioavailability equal in both forms and for combined drugs. Ranges of means. Estimated from graph. Healthy 19-33 yr old males, wt 53-104 kg RIA
BLOOD PLASMA; DELIBERATE EXPOSURE; ANALGESICS; ANTIPYRETICS; DRUGS; DRUG INTERACTION; BIOAVAILABILITY Pritz, A.K.; Bensiger, D.P.; Peterson, J.E.; Park, G.B.; Edelson, J. 1984 Journal of Pharmaceutical Sciences 73(3):326-331				

2,7-(Epoxypentadeca(1,11,13)trienimino)naphtho(2,1-b)furan-1,11(2H)- dione, 5,6,9,17,19,21-hexahydroxy-23-methoxy-2,4,12,16,18,20,22-heptamethyl-8-(N-(4-met hyl-1-piperazinyl)formimidoyl)-, 21-acetate (8 CI) Rifamycin, 3-(((4-methyl-1-piperazinyl)imino)methyl)- (9 CI)
13292-46-1
C43-H58-N4-O12
MW 822.96, MP platelets from acetone 183-188 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
11286 Blood, plasma	6 Ingestion	a) 4.47+/-0.987-3.86+/-0.592 ug/ml b) 1.43+/-0.0220-4.19+/-0.490 ug/ml	a) Not given b) Not given	a) 0.5 and 8 hr after dose. Peak 11.85+/-1.032 at 2 hr. Fasted 12 hr before and 4 hr after b) 0.5 and 8 hr after dose. Peak 8.35+/-1.069 at 4 hr. Taken with wheat breakfast. Healthy male volunteers, 25-35 yr old Microbiological assay
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; ANTIBIOTICS Polasa, K.; Krishnaswamy, K. 1983 Journal of Clinical Pharmacology 23:433-437				

Tissue	Cases Exposure Route	Range	Mean	General Information
11287 Blood, serum	1 Ingestion	204-1 ug/ml	Not given	5-48 hr after taking 12 gm. Peak at 5 hr. Complete recovery. 14 yr old overdose victim, Kentucky Pruritis, burning sensation, skin red-orange Transient elevations in bilirubin and amylase levels Microbiologic assay
11288 Urine	Ingestion	0-905 mg	Not given	Cumulative amount recovered over 44 hr. 14 yr old overdose victim, Kentucky Pruritis, burning sensation, skin red-orange Transient elevations in bilirubin and amylase levels Microbiologic assay
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; KENTUCKY; CASE HISTORIES; ANTIBIOTICS; LAVAGE; DRUG ABUSE; DRUGS Wong, P.; Buttorff, M.B.; Heritage, R.W.; Piecoro, J.J.; Rodgers, G.C. 1984 Journal of Pediatrics 104(5):781-783				

2',6'-Acetoxylidide, 2-(diethylamino)- (8 CI); Acetamide, 2-(diethylamino)-N-(2,6-dimethylphenyl)- (9 CI)
137-58-6
C14-H22-N2-O
MW 234.33, MP 68-69 C, BP 180-181 C at 4 mm Hg, 150-160 C at 2 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
11239 Adipose	1 Injection	Not applicable	1.3 mg/kg	Autopsy samples after death from inadvertant dose, bolus of 10 mL 20% (2 g) instead of 5 ml 2% (0.1 g). 64 yr old heart patient, white, male. Admitted for chest pains Tonic clonic seizures, cardiopulmonary arrest TPGLC
11240 Blood	1 Injection	Not applicable	30 mg/L	Autopsy samples after death from inadvertant dose, bolus of 10 mL 20% (2 g) instead of 5 ml 2% (0.1 g). 64 yr old heart patient, white, male. Admitted for chest pains Tonic clonic seizures, cardiopulmonary arrest TPGLC
DELIBERATE EXPOSURE; BLOOD; BRAIN; HEART; KIDNEYS; LUNGS; SPLEEN; MUSCLES; ADIPOSE TISSUE; AUTOPSIES; ANESTHETICS; ACCIDENTAL POISONING; DRUGS Pohlle, A.; Mackell, M.A.; Tucker, E.P. 1984 Journal of Forensic Sciences 29(4):1229-1236				

Tissue	Cases Exposure Route	Range	Mean	General Information
11241 Blood	9 Injection	1.19-2.07 ug/ml	1.70+/-0.34 ug/ml	Peak 30 min after 12 mo of 2% solution (240 mg) was sprayed onto fallopian tubes of patients undergoing tubal ligation via laparoscopy. Provided pain relief with less chance of toxic reactions. Healthy volunteers GC
BLOOD; DELIBERATE EXPOSURE; ADULTS; ANESTHETICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; SURGERY Spielman, F.J.; Hulka, J.F.; Ostheimer, G.W.; Mueller, R.A. 1983 American Journal of Obstetrics and Gynecology 146(7):821-824				

Tissue	Cases Exposure Route	Range	Mean	General Information
11242 Blood	a) 2 b) 62	a) 4.2-6.3 mg/l b) 0.8-160 mg/l	a) 5.3 mg/l b) 10.7 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980. Autopsy, Maryland State Medical Examiners office. Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooke, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

2',6'-Acetoxylidide, 2-(diethylamino)- (8 CI); Acetamide, 2-(diethylamino)-N-(2,6-dimethylphenyl)- (9 CI)
137-58-6
C14-H22-N2-O
MW 234.33, MP 68-69 C, BP 160-161 C at 4 mm Hg, 159-160 C at 2 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
11243 Blood, fetal	20 Injection	a) Not given b) Not given	a) 1006+/-882 ng/ml b) 991+/-840 ng/ml	a) At birth, umbilical artery after mother received 40 ml of 1% solution, 20 cases b) At birth, umbilical vein after mother received 40 ml of 1% solution, 28 cases. Neonates, gestational age 40.2+/-1.5 wk Mild to severe bradycardia, acidosis, neonatal depression GC
BLOOD PLASMA; FETAL BLOOD; DELIBERATE EXPOSURE; ADULTS; NEWBORN; ANESTHETICS; DRUG THERAPY; DRUGS; BIOACCUMULATION; TRANSPLACENTAL TRANSFER; PREGNANCY; METABOLITES Weiss, R.R.; Halevy, S.; Almonte, R.O.; Gundersen, K.; Hinevark, O.N.; O'Brien, J.E. 1985 Anesthesia and Analgesia 62:168-173				

Tissue	Cases Exposure Route	Range	Mean	General Information
11244 Blood, plasma	6 Injection	a) 2.1-2.0 ug/ml b) 2.6-2.3 ug/ml c) 2.4-2.1 ug/ml	a) 2.1+/-0.2 ug/ml b) 2.5+/-0.3 ug/ml c) 2.7+/-0.4 ug/ml	a) Steady state, 16-30 hr after start of 2 mg/min infusion b) Propranolol pretreatment (80 mg/8 hr for 5 d), steady state, 16-30 hr after start of 2 mg/min infusion c) Nadolol pretreatment (160 mg for 6 d), steady state, 16-30 hr after start of 2 mg/min infusion Concluded lidocaine metabolism not affected by presence of propranolol or nadolol. 3 males, 3 females, healthy volunteers, fasted overnight Immunoassay
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; BETA BLOCKER; DRUG INTERACTION; DRUG THERAPY; ANESTHETICS; BIOACCUMULATION Schaeck, D.W.; Luderer, J.R.; Davis, D.; Vary, J. 1984 Clinical Pharmacology and Therapeutics 36(5):584-587				

Tissue	Cases Exposure Route	Range	Mean	General Information
11245 Blood, plasma	1 Injection	a) 1.75-0.42 ug/mL b) 0.32-0.48 ug/mL c) 0.17-0.35 ug/mL Estimated from graph	a) Not applicable b) Not applicable c) Not applicable	a) Lidocaine, 8 min-560 min, peak 80 min, 6.25 ug/mL b) MEGX, 20 min-560 min, peak 140 min, 0.98 ug/mL c) GX, 40 min-560 min, plateau 140 min, 0.32 ug/mL 360, 240, and 200 mg epidurally at 0, 40, and 80 min. Monoethylglycinexylidide (MEGX) and glycinexylidide (GX) main metabolites. Therapeutic range, 1.5-6 mg/L. Toxicity, >8 mg/L. Describes system for monitoring. 37 yr old surgery patient HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; CASE HISTORIES; ANTIARRHYTHMIC AGENTS; DRUGS; COMPARATIVE EVALUATIONS; MEASUREMENT METHODS; BIOLOGICAL MONITORING; METABOLITES Kushida, K.; Oka, K.; Suganuma, T.; Ishizaki, T. 1984 Clinical Chemistry 30(5):637-640				

2',6'-Acetoxylidide, 2-(diethylamino)- (8 CI); Acetamide, 2-(diethylamino)-N-(2,6-dimethylphenyl)- (9 CI)
137-58-6
C14-H22-N2-O
MW 234.33, MP 68-69 C, BP 160-161 C at 4 mm Hg, 159-160 C at 2 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
11246 Blood, plasma				Review of the clinical pharmacology of antiarrhythmic agents, including metabolites, protein binding, monitoring of plasma levels, and effects of drug interactions.

ANTIARRHYTHMIC AGENTS; DRUG THERAPY; DRUGS; DELIBERATE EXPOSURE; BLOOD PLASMA; REVIEW
Woosley, R.L.; Cerskus, I.; Roden, D.M. 1984 Journal of Clinical Pharmacology 24:295-305

Tissue	Cases Exposure Route	Range	Mean	General Information
11247 Blood, plasma	18 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 1.51 l/kg b) 2.45 l/kg c) 24% d) 39% e) 31% f) 42% g) 1.98 l/kg h) 1.58 l/kg	a) Steady-state volume of distribution, 9 males b) Steady-state volume of distribution, 9 females c) Oral bioavailability, % dose, 9 males d) Oral bioavailability, % dose, 9 females e) Control oral bioavailability, % dose, all subjects f) Oral bioavailability after 3 d cimetidine pretreatment, % dose, all subjects g) Control volume of distribution, all subjects h) Volume of distribution after 3 d cimetidine pretreatment, all subjects 200 mg dose, concluded cimetidine reduces metabolic clearance. 9 males, 9 females. Healthy volunteers GC

BLOOD PLASMA; DELIBERATE EXPOSURE; AUSTRALIA; ADULTS; ANTIHISTAMINES; DRUG INTERACTION; DRUG THERAPY; BIOACCUMULATION; BIOAVAILABILITY; ANESTHETICS; DRUGS
Wing, L.M.H.; Minors, J.O.; Birkett, D.J.; Phil, D.; Foenander, T.; Lillywhite, K.; Wanwimolruk, S. 1984 Clinical Pharmacology and Therapeutics 35(5):695-701

Tissue	Cases Exposure Route	Range	Mean	General Information
11248 Blood, plasma	a) 8 b) 21 Injection	a) Not given b) Not given	a) 1655+/-478 ng/ml b) 984+/-759 ng/ml	a) Maternal vein 5 min after 40 ml of 1% solution b) maternal vein at delivery after 40 ml of 1% solution. Healthy 18-39 yr olds, undergoing childbirth GC

BLOOD PLASMA; FETAL BLOOD; DELIBERATE EXPOSURE; ADULTS; NEWBORN; ANESTHETICS; DRUG THERAPY; DRUGS; BIOACCUMULATION; TRANSPLACENTAL TRANSFER; PREGNANCY; METABOLITES
Weiss, R.R.; Halevy, S.; Almonte, R.O.; Gundersen, K.; Hinsvark, O.N.; O'Brien, J.E. 1983 Anesthesia and Analgesia 62:168-173

2',6'-Acetoxylidide, 2-(diethylamino)- (8 CI); Acetamide, 2-(diethylamino)-N-(2,6-dimethylphenyl)- (9 CI)
137-58-6
C14-H22-N2-O
MW 234.33, MP 68-69 C, BP 180-181 C at 4 mm Hg, 159-160 C at 2 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
11249 Blood, serum	a) 24 b) 24 c) 24 d) 27 e) 6 f) 27 g) 6 Injection	a) 1.7-11.4 ug/ml b) 0.3-5.2 ug/ml c) 0.1-1.26 ug/ml d) 2.2-16.5 ug/ml e) 4.1-8.3 ug/ml f) 0.3-5.2 ug/ml g) 1.5-4.0 ug/ml	a) 6.1+/-3.3 ug/ml b) 1.9+/-1.3 ug/ml c) 0.46+/-0.39 ug/ml d) 6.0+/-3.3 ug/ml e) 6.2+/-1.3 ug/ml f) 1.9+/-1.3 ug/ml g) 2.6+/-0.8 ug/ml	a) Parent compound b) Monethyl metabolite c) Glycinexylidide metabolite d) Patients without toxic reaction, parent compound e) Patients with toxic reaction, parent compound f) Monethyl metabolite, patients without toxic reaction g) Monethyl metabolite, patients with toxic reaction Steady-state, unreported dose. Cardiac patients undergoing therapy Drug toxicity HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; CARDIOVASCULAR DISEASES; DRUGS; DRUG THERAPY; ANTIARRHYTHMIC AGENTS; BIOACCUMULATION; METABOLITES Drayer, D.E.; Lorenzo, B.; Werne, S.; Reidenberg, M.M. 1983 Clinical Pharmacology and Therapeutics 34(1):14-22				

Tissue	Cases Exposure Route	Range	Mean	General Information
11250 Blood, serum	1 Injection	a) 125-3 ng/ml b) 400-5 ng/ml c) 1000-7 ng/ml	a) Not given b) Not given c) Not given	a) 0.25 and 8 hr after 25 mg infusion IV b) 5 min and 10 hr after 75 mg IV c) 0.25 and 10 hr after 100 mg IV 7 subjects received drug in increasing doses separated by 1 wk. Half-life increased from 1.8+/-0.1 in a), to 2.09+/-0.14 in c). Within this dosage range, kinetic profile not dose-dependent in healthy humans. Estimated from figure. Healthy volunteer GC
BLOOD SERUM; DELIBERATE EXPOSURE; ANALGESICS; ANESTHETICS; DRUGS; SEDATIVES; METABOLISM Ochs, H.R.; Knuchel, M.; Abernethy, D.R.; Greenblatt, D.J. 1983 Journal of Clinical Pharmacology 23:186-188				

Tissue	Cases Exposure Route	Range	Mean	General Information
11251 Brain	1 Injection		135 mg/kg	Autopsy samples after death from inadvertant dose, bolus of 10 mL 20% (2 g) instead of 5 ml 2% (0.1 g). 64 yr old heart patient, white, male. Admitted for chest pains Tonic clonic seizures, cardiopulmonary arrest TPGLC
11252 Heart	1 Injection	Not applicable	106 mg/kg	Autopsy samples after death from inadvertant dose, bolus of 10 mL 20% (2 g) instead of 5 ml 2% (0.1 g). 64 yr old heart patient, white, male. Admitted for chest pains Tonic clonic seizures, cardiopulmonary arrest TPGLC

(next page)

2',6'-Acetoxylidide, 2-(diethylamino)- (8 CI); Acetamide, 2-(diethylamino)-N-(2,6-dimethylphenyl)- (9 CI)
137-58-6
C14-H22-N2-O
MW 234.33, MP 68-69 C, BP 180-181 C at 4 mm Hg, 159-160 C at 2 mm Hg

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
11283 Kidney	1 Injection	Not applicable	204 mg/kg	Autopsy samples after death from inadvertant dose, bolus of 10 mL 20% (2 g) instead of 5 ml 2% (0.1 g). 64 yr old heart patient, white, male. Admitted for chest pains Tonic clonic seizures, cardiopulmonary arrest TPGLC
11284 Lung	1 Injection	Not applicable	87 mg/kg	Autopsy samples after death from inadvertant dose, bolus of 10 mL 20% (2 g) instead of 5 ml 2% (0.1 g). 64 yr old heart patient, white, male. Admitted for chest pains Tonic clonic seizures, cardiopulmonary arrest TPGLC
11285 Muscle	1 Injection	Not applicable	20 mg/kg	Autopsy samples after death from inadvertant dose, bolus of 10 mL 20% (2 g) instead of 5 ml 2% (0.1 g). 64 yr old heart patient, white, male. Admitted for chest pains Tonic clonic seizures, cardiopulmonary arrest TPGLC
11286 Spleen	1 Injection	Not applicable	115 mg/kg	Autopsy samples after death from inadvertant dose, bolus of 10 mL 20% (2 g) instead of 5 ml 2% (0.1 g). 64 yr old heart patient, white, male. Admitted for chest pains Tonic clonic seizures, cardiopulmonary arrest TPGLC

DELIBERATE EXPOSURE; BLOOD; BRAIN; HEART; KIDNEYS; LUNGS; SPLEEN; MUSCLES; ADIPOSE TISSUE; AUTOPSIES; ANESTHETICS; ACCIDENTAL POISONING; DRUGS
Pohlle, A.; Mackell, M.A.; Tucker, E.P. 1984 Journal of Forensic Sciences 29(4):1229-1236

2',6'-Pipecoloxylidide, 1-butyl- (8 CI); 2-Piperidinecarboxamide, 1-butyl-N-(2,6-dimethylphenyl)- (9 CI)
2180-92-9
C18-H28-N2-O
MW 288.43, MP 107-108 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11287 Blood	12 Injection	0.20-0.77 ug/ml	0.44+/-0.15 ug/ml	Peak 60 min after 20 ml of 0.5% solution (100 mg) was sprayed onto fallopian tubes of patients undergoing tubal ligation via laparoscopy. Provided pain relief with less chance of toxic reactions. Healthy volunteers GC

BLOOD; DELIBERATE EXPOSURE; ADULTS; ANESTHETICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; SURGERY
Spielman, F.J.; Hulka, J.F.; Ostheimer, G.W.; Mueller, R.A. 1983 American Journal of Obstetrics and Gynecology 146(7):821-824

2',6'-Pipecoloxylidide, 1-butyl- (8 CI); 2-Piperidinecarboxamide, 1-butyl-N-(2,6-dimethylphenyl)- (9 CI)
2180-92-9
C18-H28-N2-O
MW 288.43, MP 107-108 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11258 Blood, serum	8	a) 1.1-1.0 mg/l b) 0.1-0.2 mg/l	a) Not applicable b) Not applicable	a) 0-3 hr, shallow peak (1.2 mg/l) at 30 min after dose of 150 mg for epidural analgesia in 5 patients b) 0-3 hr, shallow peak (0.3 mg/l) at 2 hr, after dose of 22.5 mg for spinal analgesia in 3 patients New assay. Patients with arthritis, 26-71 yr old. HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; FINLAND; ADULTS; ANESTHETICS Lindberg, R.L.P.; Pihlajamaki, K.K. 1984 Journal of Chromatography 309:369-374				

2H-Benzimidazol-2-one, 1-(3-(4-(diphenylmethyl)-1-piperazinyl)propyl)-1,3-dihydro-
60607-34-3
C27-H30-N4-O

Tissue	Cases Exposure Route	Range	Mean	General Information
11259 Blood, plasma	3 Ingestion	Not given	24 ng eq/ml	Peak level 2 hr after 60 mg labelled with C-14. Back to 0 level at 8 hr. Healthy 27-41 yr olds, wt 66-70 kg HPLC
11260 Urine	3 Ingestion	Not given	40.1+/-2.0%	% dose recovered in 0-96 hr after 60 mg labelled with C-14. Maximal recovery 0-2 hr, 15.28+/-1.03%. Healthy 27-41 yr olds, wt 66-70 kg HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ANTIHISTAMINES; DRUGS Meuldermans, W.; Hendrickx, J.; Knaeps, F.; Lauwers, W.; Heykants, J.; Grindel, J.M. 1984 Xenobiotica 14(6):445-462				

2H-Benzimidazol-2-one, 1,3-dihydro-1-(3-((2-hydroxy-3-(1-naphthalenyloxy)propyl)amino)-3-methylbutyl)-, monohydrochloride
75708-29-1
C25-H29-N3-O3.Cl-H

Tissue	Cases Exposure Route	Range	Mean	General Information
11261 Blood, plasma	a) 3 b) 3 c) 3 d) 3 Ingestion	a) 2.5-10 ng/ml b) 5-25 mg/ml c) 7.5-50 ng/ml d) 10-140 ng/ml	a) Not given b) Not given c) Not given d) Not given	a) 0.5 and 4 hr after 5 mg dose, 5 ng/ml at 6 hr b) 10 mg dose, 20 ng/ml at 6 hr c) 25 mg dose, 55 ng/ml at 6 hr d) 50 mg dose, 90 ng/ml at 6 hr Ranges of means. Improved assay. Limit of detection 0.5 ng/ml. Values estimated from figure. Healthy volunteers HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ANTIHYPERTENSIVE AGENTS; DRUGS; MEASUREMENT METHODS Wiedemann, I. 1983 Arzneimittel-Forschung Drug Research 33(1):861-864				

2H-1-Benzopyran-6-ol, 3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-, (2R-(2R*(4R*,8R*)))-
59-02-9
C29-H50-O2
MW 430.69, MP 2.5-3.5 C, BP 200-220 C at 0.1 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
11262 Blood, plasma	a) 64 b) 70 Injection	a) 0.5-3.5 mg/dl b) 0.5-1.5 mg/dl	a) Not given b) Not given	a) 0 and 7 d old. 100 mg/kg/d dl-alpha-tocopheryl actetate via nasogastric tube within 8 hr of birth. IM doses: d 1, 15 mg/kg. d 2, 4 and 6, 10 mg/kg b) 0 and 7 d old. 100 mg/kg/d dl-alpha-tocopheryl acetate via nasogastric tube within 8 hr of birth. Placebo injections on d 1, 2, 4 and 6 21 controls and 20 treated infants not feeding orally also received 10 mg/kg IM every 3rd d (levels in adult physiologic range). Incidence, severity of intraventricular hemorrhage significantly less in treated infants. Premature infants, <=1500 g at birth and 28 wk gestation, Texas

BLOOD PLASMA; DELIBERATE EXPOSURE; TEXAS; PREMATURE INFANTS; COMPARATIVE EVALUATIONS; DRUGS; DRUG THERAPY; VITAMIN E
Speer, M.E.; Blifeld, C.; Rudolph, A.J.; Chadda, P.; Holbein, M.E.B.; Hittner, H.M. 1984 Pediatrics 74(6):1107-1112

Tissue	Cases Exposure Route	Range	Mean	General Information
11263 Blood, plasma	59 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) 1.00+/-0.06-0.85+/-0.05 mg/dL S.E.	a) 1.06+/-0.07 mg/dL b) 1.78+/-0.19 mg/dL c) 1.06+/-0.07 mg/dL d) 0.90+/-0.12 mg/dL e) 1.84+/-0.25 mg/dL f) 0.95+/-0.06 mg/dL g) 0.85+/-0.16 mg/dL h) 1.28+/-0.17 mg/dL i) Not given S.E.	a) Baseline, alpha-tocopherol group, 15 cases b) 16 wk, 800 IU/d, alpha-tocopherol c) Baseline, retinyl palmitate group, 15 cases d) 16 wk, 25000 IU/d retinyl palmitate, 16 of c) e) 16 wk, 25000 IU/d retinyl palmitate, wk 1-16 and 800 IU/d alpha-tocopherol, wk 8-16, 6 of c) f) Baseline, beta-carotene group, 14 cases g) 16 wk, 30 mg/d beta-carotene, 4 of f) h) 16 wk, 30 mg/d beta-carotene, wk 1-16 and 800 IU/d alpha-tocopherol, wk 8-16, 5 of f) i) Baseline and 16 wk, controls, placebo 1x/d Additional data given. 23-57 yr old healthy laboratory staff volunteers not taking vitamin supplements HPLC

BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; COMPARATIVE EVALUATIONS; VITAMIN A; VITAMIN E; CAROTENOIDS
Willett, W.C.; Stampfer, M.J.; Underwood, B.A.; Taylor, J.O.; Hennekens, C.H. 1983 American Journal of Clinical Nutrition 38:559-566

2H-1-Benzopyran-6-ol, 3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-, (2R-(2R*(4R*,8R*)))-
59-02-9
C29-H50-O2
MW 430.69, MP 2.5-3.5 C, BP 200-220 C at 0.1 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
11364 Blood, serum	15 Ingestion	a) Not given b) 0.17-0.49 mg/ml c) 0.74-1.57 mg/ml	a) 0.29+/-0.11 mg/ml b) Not given c) Not given	a) 12 subjects 9 mo-2 yr old. 11 cholestatic. Levels significantly inversely correlated with serum bile acids b) 3 subjects 2-3 mo old c) Group b) after 6-9 mo of 5-10 mg/kg/d alpha-tocopherol acetate orally, begun soon after surgery Additional data on older children without supplement show higher levels than a). 2 mo-2 yr children with corrected biliary atresia, Japan Fluorometry
BLOOD SERUM; DELIBERATE EXPOSURE; JAPAN; INFANTS; LIVER DISEASES; NUTRITIONAL DISORDERS; NUTRITIONAL DEFICIENCIES; VITAMIN E; DRUGS Tazawa, Y.; Nakagawa, M.; Yamada, M.; Konno, T.; Tada, K.; Ohi, R.; Kasai, M. 1984 American Journal of Clinical Nutrition 40:246-250				

Tissue	Cases Exposure Route	Range	Mean	General Information
11265 Blood, serum	a) 16 b) 19 Ingestion	a) 1.3+/-0.4-2.6+/-1.6 mg/dl b) 1.3+/-0.3-1.1+/-0.3 mg/dl	a) Not given b) Not given	a) 0-12 wk, peak at 12. Dose 400 IU 2/d b) 0-12 wk, peak at 0. Placebo Ranges of means. No effect on anemia or transfusion requirements. Adults with end-stage renal disease, undergoing hemodialyis, Missouri
BLOOD SERUM; DELIBERATE EXPOSURE; MISSOURI; ANEMIA; KIDNEY DISEASES; HEMODIALYSIS; VITAMIN E; DRUGS Sinsakul, V.; Drake, J.R.; Leavitt, J.N.; Harrison, B.R.; Fitch, C.D. 1984 American Journal of Clinical Nutrition 39:223-226				

2H-1,2-Benzothiazine-3-carboxamide, 4-hydroxy-2-methyl-N-2-pyridinyl-, 1,1-dioxide
36322-90-4
C15-H13-N3-O4-S
MW 331.37

Tissue	Cases Exposure Route	Range	Mean	General Information
11266 Blood, serum	1 Ingestion	23.5-4.7 mg/l	Not applicable	12-48 hrs after admission to hospital. Patient attempted suicide by ingesting 56 capsules (10 mg ea), 97 tablets griseofulvin (125 mg ea), and 10 tablets fentiazac (100 mg ea). Uneventful recovery after gastric lavage, vitamin K, and observation. Chinese male Drowsiness, episodic twitching of lips and jaw, monoclonic twitching of limbs. 5 sec duration
BLOOD SERUM; DELIBERATE EXPOSURE; HONG KONG; ADULTS; SUICIDE; DEPRESSION; ANALGESICS; ANTIFUNGAL AGENTS; DRUG ABUSE; DRUGS; DRUG THERAPY; BIOACCUMULATION Lo, G.C.C.; Chan, J.Y.W. 1983 British Medical Journal 287:796				

2H-1,2,4-Benzothiadiazine-7-sulfonamide, 6-chloro-3,4-dihydro-,1,1-dioxide
58-93-5
C7-H8-Cl-N3-O4-S2
MW 297.72, MP 273-275 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11267 Blood, plasma	12 Ingestion	a) 115+/-29-4.6+/-5.2 ng/ml b) 251+/-102-8.7+/-4.6 ng/ml c) 401+/-90-12.5+/-5.4 ng/ml	a) Not given b) Not given c) Not given	a) 3 and 36 hr after 25 mg, 22.8+/-21.9 at 0.5 hr b) 3 and 36 hr after 50 mg. 49.5+/-36.6 at 0.5 hr c) 3 and 36 hr after 100 mg. 115+/-113 at 0.5 hr Ranges of means after tablet dosage. Suspension doses produced significant differences only at 0.5 hr: 41.7+/-29.4 ng/ml for 25 mg, 105+/-51 ng/ml for 50 mg, and 125+/-12 ng/ml for 100 mg. Good correlation found between plasma levels and urinary excretion. Pharmacokinetic data also given. Healthy volunteers, Wisconsin HPLC
11268 Urine	12 Ingestion	a) 7-12 ng b) 14-22 ng c) 32-45 ng d) 68-108 ng	a) Not given b) Not given c) Not given d) Not given	a) Recovery at 6 and 48 hr after 25 mg b) 50 mg c) 100 mg d) 200 mg Ranges of means, values estimated from figure. No significant dosage or formulation (tablet vs suspension) effects in % recovery at any collection time. Mean cumulative recovery 50-60% of all dosages. Electrolyte excretion and pharmacokinetic data also reported. Healthy volunteers HPLC

BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; WISCONSIN; DIURETICS; DRUGS

Patel, R.B.; Patel, U.R.; Rogge, M.C.; Shah, V.P.; Prasad, V.K.; Selen, A.; Welling, P.G. 1984 Journal of Pharmaceutical Sciences 73(3):359-361

2H-1,3,2-Oxazaphosphorine, 2-(bis(2-chloroethyl)amino)tetrahydro-, 2-oxide (8 CI); 2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide (9 CI)
50-18-0
C7-H15-Cl2-N2-O2-P
MW 261.11

Tissue	Cases Exposure Route	Range	Mean	General Information
11269 Blood, plasma	5 Injection	a) 80.3+/-6.6-3.2+/-2.1 ug/ml b) 85.6+/-20.3-0.6+/-0.6 ug/ml c) 70.4+/-10.9-0.3+/-0.1 ug/ml d) 65.3+/-15.4-0.1 ug/ml	a) Not given b) Not given c) Not given d) Not given	a) Day 1, 0.5 and 24 hr b) Day 2, 1 and 24 hr c) Day 3, 0.5 and 24 hr d) Day 4, 0.5 and 24 hr Ranges of means after 50 mg/kg/d infusion for 4 d. Cancer patients GLC

BLOOD PLASMA; DELIBERATE EXPOSURE; CARCINOMAS; NEOPLASMS; ANTITUMOR AGENTS; DRUGS; CHEMOTHERAPY; METABOLISM

Graham, M.I.; Shaw, I.C.; Souhami, R.L.; Sidau, B.; Harper, P.G.; McLean, A.E.M. 1983 Cancer Chemotherapy and Pharmacology 10:192-193

2H-1,3,2-Oxazaphosphorine, 2-(bis(2-chloroethyl)amino)tetrahydro-, 2-oxide (8 CI); 2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide (9 CI)
50-18-0
C7-H15-Cl2-N2-O2-P
MW 261.11

Tissue	Cases Exposure Route	Range	Mean	General Information
11270 Urine	a) 5 b) 2 Dermal Inhalation	a) 0.0-16.47 ug b) 0.35-9.06 ug	a) Not given b) Not given	a) Patients, 24 hr total after topical application (50 ul, 20 mg/ml in methanol). Last theraputic dose >2 wk prior b) Nurses. Samples collected 10 min-18 hr after preparing drug for patients No correlation between levels and quantity handled 40-71 yr old cancer patients in remission and cancer clinic nurses, Canada GC/MS
URINE; DELIBERATE EXPOSURE; OCCUPATIONAL EXPOSURE; CANADA; ADULTS; ANTITUMOR AGENTS Hirst, M.; Mills, D.G.; Tee, S.; Levin, L.; White, D.R. 1984 Lancet 8370:186-188				

2H-1,4-Benzodiazepin-2-one, 1,3-dihydro-7-nitro-5-phenyl-
146-22-5
C15-H11-N3-O3
MW 281.26, MP 224-226 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11271 Blood, plasma	12 Ingestion	48+/-14.7 ng/ml	Not applicable	Peak, 1.8+/-1.6 hr after 5 mg. Healthy volunteers GC
BLOOD PLASMA; DELIBERATE EXPOSURE; NETHERLANDS; ADULTS; DRUG THERAPY; DRUGS; HYPNOTICS; TRANQUILIZERS; DIAZEPAMS; BIOACCUMULATION; BENZODIAZEPINES Jochemsen, R.; van Boxtel, C.J.; Hermans, J.; Breimer, D.D. 1983 Clinical Pharmacology and Therapeutics 34(1):42-47				

Tissue	Cases Exposure Route	Range	Mean	General Information
11272 Blood, serum	5 Ingestion	a) Not given b) Not given	a) 66+/-7.2 ng/ml b) 66+/-15.3 ng/ml	a) Control, peak at 1.24+/-0.43 hr b) Cimetidine-treated subjects (200 mg t.i.d.), peak at 1.00+/-0.40 hr 10 mg dose. Cimetidine reduced clearance and increased elimination time. Healthy volunteers, 18-23 yr old GC-EC; HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; GERMANY; GASTROINTESTINAL DISEASES; BEHAVIOR DISORDERS; HYPNOTICS; DRUG THERAPY; DRUGS; DRUG INTERACTION; BIOACCUMULATION; METABOLITES Ochs, H.R.; Greenblatt, D.J.; Gugler, R.; Muntefering, G.; Locniskar, A.; Abernethy, D.R. 1983 Clinical Pharmacology and Therapeutics 34(2):227-230				

2H-1,4-Benzodiazepin-2-one, 5-(o-fluorophenyl)-1,3-dihydro-1-methyl-7-nitro- (8CI); 2H-1,4-Benzodiazepin-2-one, 5-(2-fluorophenyl)-1,3-dihydro-1-methyl-7-nitro- (9 CI)
1622-62-4
C16-H12-F-N3-O3
MW 313.30, MP 166-167 C (also reported as 170-172 C)

Tissue	Cases Exposure Route	Range	Mean	General Information
11278 Blood, plasma	12 Ingestion	a) 7.4+/-2.1 ng/ml b) 17+/-4 ng/ml	a) Not applicable b) Not applicable	a) Peak, 1.3+/-0.9 hr after 15 mg b) Desalkyl metabolite, peak, 16+/-13 hr after 15 mg. Healthy volunteers GC
BLOOD PLASMA; DELIBERATE EXPOSURE; NETHERLANDS; ADULTS; DRUG THERAPY; DRUGS; HYPNOTICS; TRANQUILIZERS; DIAZEPAMS; BIOACCUMULATION; BENZODIAZEPINES Jochemsen, R.; van Boxtel, C.J.; Hermans, J.; Breimer, D.D. 1983 Clinical Pharmacology and Therapeutics 34(1):42-47				

2H-1,4-Benzodiazepin-2-one, 7-bromo-1,3-dihydro-5-(2-pyridyl)- (8 CI); 2H-1,4-Benzodiazepin-2-one, 7-bromo-1,3-dihydro-5-(2-pyridinyl)- (9 CI)
1812-30-2
C16-H10-Br-N3-O
MW 316.16, MP 237-238.5 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
11274 Blood, plasma	11 Ingestion	494.5+/-484.7-524.7+/-402.2 ng/ml	Not given	Day 14 and 28 of treatment with 6 mg 3X/d Ranges of means. 5 wk trial, placebo washout during wk 1. More effective than diazepam in improving anxiety ratings. 19-58 yr old outpatients under treatment for anxiety disorder Mild to moderate drowsiness in ten cases, tending to diminish with time. Depression in seven Ataxia in nine HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; DISEASES; DRUG THERAPY; DRUGS; PSYCHOTROPIC DRUGS; DIAZEPAMS; BROMINE ORGANIC COMPOUNDS; METABOLITES Fontaine, R.; Annable, L.; Chouinard, G.; Ogilvie, R.I. 1983 Journal of Clinical Psychopharmacology 3(2):80-87				

2H-1,4-Benzodiazepin-2-one, 7-chloro-1-(cyclopropylmethyl)-1,3-dihydro-5-phenyl-
2955-38-6
C19-H17-Cl-N2-O
MW 324.83, MP 145-146 C (also reported 144-147 C)

Tissue	Cases Exposure Route	Range	Mean	General Information
11275 Blood, serum	8 Ingestion	a) 160-257+/-29 ng/ml b) 236-9 ng/ml S.E.	a) 218+/-29 ng/ml b) Not given S.E.	a) Maximum levels, at 2.5-12.0 hr b) At 6.0 hr-11.5 d, 1 case After 40 mg dose. Measured as desmethyldiazepam. Estimated from graph. Healthy volunteers, 19-28 yr, 55-90 kg GC-EC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; BENZODIAZEPINES; DRUGS; METABOLISM; DIAZEPAMS Ochs, H.R.; Greenblatt, D.J.; Verburg-Ochs, B.; Locniskar, A. 1984 Journal of Clinical Pharmacology 24:446-451				

2H-1,4-Benzodiazepin-2-one, 7-chloro-1-(2-(diethylamino)ethyl)-5-(o-fluorophenyl)-1,3-dihydro- (8 CI) 2H-1,4-Benzodiazepin-2-one, 7-chloro-1-(2-(diethylamino)ethyl)-5-(2-fluorophenyl)-1,3-dihydro- (9 CI)
17617-23-1
C21-H23-Cl-F-N3-O
MW 387.91

Tissue	Cases Exposure Route	Range	Mean	General Information
11270 Blood	a) 8 b) 1	a) 0.8-7.1 mg/l b) Not applicable	a) 3.2 mg/l b) 26 mg/l	a) Non-drug related deaths, 1975-1980 b) Multiple-drug related death, 1979-1980. Autopsy, Maryland State Medical Examiner's office Death

BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS

Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230

Tissue	Cases Exposure Route	Range	Mean	General Information
11277 Blood, plasma	6 Ingestion	a) Not given b) Not given c) 31-3.5 ng/ml d) 20-4.5 ng/ml	a) 34.9+/-4.2 ng/ml b) 38.3+/-7.9 ng/ml c) Not applicable d) Not applicable S.E.	a) Control, peak, at 27.8+/-11.2 hr b) With cimetidine, peak, at 39.3+/-11.9 c) Control, at 1 and 5 d, 1 case c) With cimetidine, at 1 and 5 d, 1 case Measured as desalkylflurazepam metabolite, single 30-mg dose, c) and d) times and levels estimated from graph. Cimetidine prolonged half-life of metabolite. Healthy adults, 23-44 yr, no other medications GC-EC

BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; DRUG INTERACTION; BENZODIAZEPINES; METABOLISM; METABOLITES

Greenblatt, D.J.; Abernethy, D.R.; Koepke, H.H.; Shader, R.I. 1984 Journal of Clinical Pharmacology 24:187-193

Tissue	Cases Exposure Route	Range	Mean	General Information
11270 Blood, plasma				Review. Pharmacokinetic properties and metabolism of benzodiazepines, relating differences among drugs to differences in clinical action. Use as marker compounds for evaluation of changes in metabolizing capacity in old age discussed.

BLOOD PLASMA; DELIBERATE EXPOSURE; AGE; ADULTS; DRUGS; BENZODIAZEPINES; REVIEW; DIAZEPAMS; METABOLISM; METABOLITES; BIOAVAILABILITY; BIOACCUMULATION

Greenblatt, D.J.; Divoll, M.; Abernethy, D.R.; Ochs, H.R.; Shader, R.I. 1983 Drug Metabolism Reviews 14(2):251-292

2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-1-methyl-5-phenyl-
439-14-5
C16-H13-Cl-N2-O
MW 284.70, MP 126-126 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11279 Blood	1 Ingestion	a) Not applicable b) Not applicable	a) 0.5 ng/L b) 0.6 mg/L	a) Diazepam b) Desmethyl diazepam Postmortem levels after taking >12 Darvocet-N tablets 19 yr old male Caucasian, wt 77 kg, ht 1.85 m Unconsciousness, probably at >2 hr, <7 hr, death <14 hr, possibly <7 hr after ingestion of tablets GC-EC
DELIBERATE EXPOSURE; DRUGS; SUICIDE; AUTOPSIES; BLOOD; URINE; ANALGESICS Eberhardt, R.D.; Cash, D.K. 1984 Journal of Analytical Toxicology 8:246-247				

Tissue	Cases Exposure Route	Range	Mean	General Information
11280 Blood	1 Injection	Not applicable	0.8 mg/L	Autopsy data. Death ascribed to fentanyl. 33 yr old physician/officer, apparently self-injected with 'Sublimaze' (fentanyl) and 'Valium' (diazepam). GC/MS
SUICIDE; DRUGS; DRUG ABUSE; BLOOD; URINE; BILE; DELIBERATE EXPOSURE Garriott, J.C.; Rodriguez, R.; Di Maio, V.J.M. 1984 Journal of Analytical Toxicology 8:268-269				

Tissue	Cases Exposure Route	Range	Mean	General Information
11281 Blood	7 Ingestion	a) 55-8.5 ng/ml b) 28-7 ng/ml	a) Not applicable b) Not applicable	a) Desmethyldiazepam metabolite, 7-30 d, peak (55 ng/ml) at 7 d b) Parent compound, 15-20 d, peak (28 ng/ml) at 15 d Data from 1 psychiatric subject, treated with 300 ug daily. Disappearance from blood appears to initiate withdrawal, but presence of metabolite both moderates severity and lengthens the withdrawal process. 6 drug abusers, patients at detoxification center. 1 patient treated for schizophrenia. TLC/GC
BLOOD; CONSUMER EXPOSURE; ADULTS; BEHAVIOR DISORDERS; DRUG ABUSE; DRUGS; ANTIDEPRESSIVE AGENTS; TRANQUILIZERS; DIAZEPAMS; BIOACCUMULATION; HEALTH HAZARDS; METABOLISM Rhodes, P.J.; Rhodes, R.S.; McCurdy, H.H. 1984 Clinical Toxicology 22(4):371-385				

2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-1-methyl-5-phenyl-
439-14-5
C16-H13-Cl-N2-O
MW 284.76, MP 125-126 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11282 Blood	a) 1 b) 1 Ingestion	a) Not applicable b) Not applicable	a) 0.08 mg/L b) 3.05 mg/L	a) Female, collapsed 2 hr after ingesting 4-6 g trazadone, survived b) Male, died 2 hr after unknown intake of multiple drugs, including trazadone and ethanol. 40 yr old female, 31 yr old male, with chronic depression In b) combined drug toxicity with pulmonary congestion, hemorrhage, edema, cerebral edema HPLC
CASE HISTORIES; DELIBERATE EXPOSURE; AUTOPSIES; SUICIDE; ANTIDEPRESSIVE AGENTS; DRUGS; DRUG ABUSE; BLOOD; URINE Root, I.; Ohlson, G.B. 1984 Journal of Analytical Toxicology 8:91-94				

Tissue	Cases Exposure Route	Range	Mean	General Information
11288 Blood	6 Injection	a) 185-860 ng/ml b) 1,050-5,000 ng/ml c) 200-660 ng/ml d) 3,000-6,800 ng/ml e) 500-890 ng/ml f) 2,400-3,500 ng/ml g) 885-2,390 ng/ml h) 7,600-15,300 ng/ml	a) 466.66 ng/ml b) 3,150 ng/ml c) 380 ng/ml d) 4,400 ng/ml e) 653.33 ng/ml f) 2,850 ng/ml g) 1,480 ng/ml h) 10,400 ng/ml	a) Diazepam, children, 3 cases b) Diazepam, neonates, 3 cases c) N-methyldiazepam (metabolite), children d) N-methyldiazepam, neonates e) Oxazepam (metabolite), children f) Oxazepam, neonates g) Total diazepam, metabolites, children h) Total diazepam metabolites, neonates Doses necessary to control spasms Significant difference between g) and h) ($p<0.05$) 6-12 yr old children and 7-10 day old neonates with 5-17 spasms/hr, tetanus ward, New Delhi, India Sedation, drowsiness which continued after therapy HPLC
INDIA; CHILDREN; NEWBORN; INFECTION; BLOOD; DRUG THERAPY; MUSCLE RELAXANTS; TRANQUILIZERS; DIAZEPAMS; METABOLITES; DRUGS; DELIBERATE EXPOSURE Tekur, U.; Gupta, A.; Tayal, G.; Agrawal, K.K. 1983 Journal of Pediatrics 102(1):145-147				

Tissue	Cases Exposure Route	Range	Mean	General Information
11284 Blood	a) 8 b) 57 c) 10	a) 1.1-3.4 mg/l b) 0.1-5.5 mg/l c) 0.19-2.6 mg/l	a) 2.0 mg/l b) 1.1 mg/l c) 0.76+/-0.88 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths, 1979-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-1-methyl-5-phenyl-
439-14-5
C16-H13-Cl-N2-O
MW 284.76, MP 125-126 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11265 Blood, plasma	26 Ingestion Injection	a) 124+/-105-100 ng/ml b) 40+/-37-100 ng/ml c) 382+/-64-134+/-25 ng/ml d) 294+/-30-99+/-15 ng/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) Morning, 5 mg oral, 0.5-10 hr, peak (215+/-73 ng/ml) at 1 hr b) Evening, 5 mg oral, 0.5-10 hr, peak (150 ng/ml) at 2 hr c) Morning, 5 mg IV, 0.25-4 hr, peak (382+/-64 ng/ml) at 0.25 hr d) Evening, 5 mg IV, 0.25-4 hr, peak (294+/-30 ng/ml) at 0.25 hr Study examined effect of diet, time of dose, and route of administration. IV dose in the morning after 9 hr fast resulted in highest levels. Healthy medical students, 22-30 yr old. GC

BLOOD PLASMA; DELIBERATE EXPOSURE; JAPAN; ADULTS; BEHAVIOR DISORDERS; TRANQUILIZERS; DIAZEPAMS; BIOACCUMULATION; BIOAVAILABILITY; CIRCADIAN RHYTHMS; DRUGS

Nakano, S.; Watanabe, H.; Nagai, K.; Ogawa, N. 1984 Clinical Pharmacology and Therapeutics 36(2):271-277

Tissue	Cases Exposure Route	Range	Mean	General Information
11266 Blood, plasma	10 Injection	a) 400-4 ng/ml b) 600-5 ng/ml	a) Not given b) Not given	a) At end of, and 7 d after, 10 mg IV b) Same as a), during concurrent oral administration of 150 mg/12 hr ranitidine Crossover study. Range of levels shown for only one subject. No significant effect of ranitidine on diazepam oxidation. Some values estimated from figure. Healthy 21-30 yr old subjects GC-EC

BLOOD PLASMA; DELIBERATE EXPOSURE; ANTIPYRETICS; TRANQUILIZERS; DRUG INTERACTION; DRUGS; METABOLISM; METABOLITES

Abernethy, D.R.; Greenblatt, D.J; Echelman, F.N.; Shader, R.I. 1984 Clinical Pharmacology and Therapeutics 35(2):188-192

Tissue	Cases Exposure Route	Range	Mean	General Information
11267 Blood, plasma	6 Ingestion	a) 350-480 ng/ml b) 70-255 ng/ml c) 80-66 ng/ml d) 30-58 ng/ml	a) 371.7+/-34.0 ng/ml b) 186.7+/-26.4 ng/ml c) Not given d) Not given S.E.	a) Peaks, 1-3 hr (mean 1.25+/-0.35 hr) after 10 mg valium tablet. GC analysis b) Peaks, 2-8 hr (mean 5.33+/-1.09 hr) after 10 mg controlled release capsule, valium CR. GC analysis c) 0 and 72 hr after 10 mg valium tablet. Peak 252+/-27 ng/ml at 1 hr. Bioassay d) 0 and 72 hr after 10 mg controlled release capsule. Peak 106+/-17 ng/ml at 8 hr. Bioassay Significant difference a) and b)-$p<0.01$. Some figures estimated from graph. Peaks by bioassay 70% of levels by GC. 21-24 yr old healthy volunteers GC; Bioassay

BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; TRANQUILIZERS; DRUGS; COMPARATIVE EVALUATIONS; MEASUREMENT METHODS; DIAZEPAMS

Tuomisto, J.; Tuomainen, P.; Saano, V. 1984 Acta Pharmacologica et Toxicologica 55:50-57

2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-1-methyl-5-phenyl-
439-14-5
C16-H13-Cl-N2-O
MW 284.76, MP 126-126 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11288 Blood, plasma	18 Ingestion	a) 200-320 ng/ml b) 200-180 ng/ml c) 160-220 ng/ml	a) Not applicable b) Not applicable c) Not applicable	a) Men, 0.28 mg/kg dose, 20-24 min, peak (550 ng/ml) at 100 min b) Women, 0.28 mg/kg on day 10 of oral contraceptive cycle, 20-240 min, peak (500 ng/ml) at 100 min c) Women, 0.28 mg/kg on day 28 of oral contraceptive cycle, 20-240 min, peak (425 ng/ml) at 100 min Also examined 0.07 and 0.14 mg/kg dose. Performance on psychomotor and cognitive-encoding tasks impaired at high dose. Impairment was less and onset retarded in women on day 10 of oral contraceptive cycle. 10 males, 21-26 yr old. 8 females, 21-26 yr old GC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; BEHAVIOR DISORDERS; TRANQUILIZERS; DIAZEPAMS; BIOACCUMULATION; DRUG INTERACTION; MENSTRUATION; DRUGS Ellinwood, E.H., Jr.; Bazler, M.E.; Linnoila, M.; Molter, D.W.; Heatherly, D.G.; Bjornsson, T.D. 1984 Clinical Pharmacology and Therapeutics 35(3):360-366				

Tissue	Cases Exposure Route	Range	Mean	General Information
11288 Blood, plasma	23 Ingestion	a) 57-6662 ng/ml b) 490-22822 ng/ml c) 1600-10 ng/ml d) 3700-750 ng/ml e) 1100-10 ng/ml f) 6900-10 ng/ml	a) 1973 ng/ml b) 3658 ng/ml c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) Parent drug, before tapering of dose (withdrawal) began, 7 cases b) Metabolite, N-desmethyldiazepam, before tapering, 7 cases c) Female addict (150-200 mg/d for 2 yr), drug on d 1 and 14 of therapy, doses decreasing from 50-<10 mg/d d) Metabolite, N-desmethyldiazepam, same patient, conditions as c) e) Male addict (450 mg/d for 10 yr), drug on admission and d 15 of therapy. Initial dose reduction too rapid (20%/d) resulting in withdrawal reaction which disappeared when dose reduction changed to 10%/d f) Metabolite, N-desmethyldiazepam, same patient, conditions as e) c-f) estimated from graph. Benzodiazepam abusers, median age 30 yr, admitted to Institute of Addiction Research Foundation, Toronto, Canada, 11/81-12/82 HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; CASE HISTORIES; DRUG ABUSE; DIAZEPAMS; CANADA; DRUGS Harrison, M.; Busto, U.; Naranjo, C.A.; Kaplan, H.L.; Sellers, E.M. 1984 Clinical Pharmacology and Therapeutics 36(4):527-533				

2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-1-methyl-5-phenyl-
439-14-5
C16-H13-Cl-N2-O
MW 284.76, MP 125-126 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11290 Blood, plasma	82 Injection Ingestion	a) 19-3 ng/ml b) 400-2 ng/ml c) Not given d) Not given e) Not given f) Not given	a) Not given b) Not given c) 222+/-16 ng/ml d) 301+/-28 ng/ml e) 244+/-22 ng/ml f) 317+/-40 ng/ml S.E.	a) 5 min and 120 hr. Peak 279+/-23 ng/ml at 3.8 hr. Fasted before & after dose. 10 cases b) 5 min and 96 hr. Representative case c) 4.3+/-0.7 hr. Dose after overnight fast. 11 cases d) 3.6+/-0.5 hr. Dose after standard breakfast. Same 11 cases e) 3.7+/-0.5 hr. Dose after overnight fast. 11 cases f) 3.1+/-0.5 hr. Dose with 30 ml Maalox (Magnesium-hydroxide), after overnight fast. Same 11 cases All except b), single 15 mg oral dose, (slow-release form) Dose b), 7.5 mg IV. 18-44 yr old healthy volunteers GC; EC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; DIAZEPAMS Locniskar, A.; Greenblatt, D.J.; Zinney, M.A.; Harmatz, J.S.; Shader, R.I. 1984 Journal of Clinical Pharmacology 24:255-263				

Tissue	Cases Exposure Route	Range	Mean	General Information
11291 Blood, plasma	84 Injection	a) 10-2 umol/l b) 340-110 Nmol/l	a) Not applicable b) Not applicable	a) Total diazepam, correlated with age, from 20-85 yr. Regression line analysis, data from graph b) Free diazepam levels correlated with age, from 20-85 yr. Regression line analysis, data from graph. Aging is associated with decreased levels. Patients, volunteers GC
BLOOD PLASMA; DELIBERATE EXPOSURE; UNITED KINGDOM; ADULTS; AGE; BEHAVIOR DISORDERS; SEDATIVES; TRANQUILIZERS; DRUG INTERACTION; DRUG THERAPY; DIAZEPAMS; BIOACCUMULATION; BIOAVAILABILITY; DRUGS Cook, P.J.; Flanagan, R.; James, I.M. 1984 British Medical Journal 289:351-353				

Tissue	Cases Exposure Route	Range	Mean	General Information
11292 Blood, plasma	6 Ingestion	a) 70-163 ng/ml b) 70-148 ng/ml c) 87-258 ng/ml d) 77-173 ng/ml	a) 114+/-36 ng/ml b) 104+/-30 ng/ml c) 170+/-55 ng/ml d) 126+/-36 ng/ml	a) Control, trough b) Ranitidine treatment (150 mg b.i.d.), trough c) Control, steady-state d) Ranitidine treatment (150 mg b.i.d.), steady-state All after 5 mg/d for 10 d. Healthy volunteers, 27-37 yr old GLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; GERMANY; GASTROINTESTINAL DISEASES; BEHAVIOR DISORDERS; BENZODIAZEPINES; DRUG INTERACTION; DRUGS; DRUG THERAPY; TRANQUILIZERS; DIAZEPAMS; BIOACCUMULATION; METABOLITES Klotz, U.; Reimann, I.W.; Ohnhaus, E.E. 1983 European Journal of Clinical Pharmacology 24:357-360				

2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-1-methyl-5-phenyl-
439-14-5
C16-H13-Cl-N2-O
MW 284.76, MP 125-126 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11288 Blood, plasma	10 Ingestion	a) Not given b) Not given	a) 349 ng/ml b) 485 ng/ml	a) After 2 wk (base-line) period, mean daily dose 15.8 mg b) Same as a), with 1200 mg cimetidine/d added to regimen Part of 8 wk study, in long-term users. After base-line period, patients took either cimetidine or placebo for 2 wk, then the other treatment, while continuing diazepam. In final 2 wk, only diazepam was ingested. Levels at end of placebo period and of final 2-wk period same as, or near, baseline levels. No significant changes in performance on psychomotor and intellectual tests given during each phase. During b), self-ratings indicated deeper sleep and reduction in sleep latency. 24-40 yr olds using diazepam 7 mo-15 yr GLC

BLOOD PLASMA; DELIBERATE EXPOSURE; BEHAVIOR DISORDERS; DRUGS; DRUG INTERACTION; TRANQUILIZERS; METABOLISM
Greenblatt, D.J.; Abernethy, D.R.; Morse, D.S.; Harmatz, J.S.; Shader, R.I. 1984 New England Journal of Medicine 310(25):1639-1643

Tissue	Cases Exposure Route	Range	Mean	General Information
11294 Blood, plasma	9 Ingestion	a) 136-190 ng/ml b) 64-155 ng/ml c) 207-555 ng/ml d) 106-272 ng/ml	a) 165 ng/ml b) 96 ng/ml c) 399 ng/ml d) 206 ng/ml	a) 5 mg/day for 22 days, 5 cirrhotic patients b) 4 controls c) Desmethyldiazepam (DMDZ) metabolite after 5 mg/day diazepam for 22 days, 4 patients d) DMDZ, 4 controls Steady state levels 48-61 yr old patients, wt 51-90 kg and 41-51 yr old controls, wt 60-87 kg Cumulation more extensive and slow in patients. Significantly greater sedative effects in patients GC-EC

ILLINOIS; CASE HISTORIES; CHILDREN; BLOOD; SODIUM; ACCIDENTAL POISONING; DRUGS; DELIBERATE EXPOSURE
Pucyraski, M.S.; Cunningham, D.G.; Mortimer, J.C. 1983 Journal of the Canadian Medical Association 128(7):821-822

Tissue	Cases Exposure Route	Range	Mean	General Information
11296 Blood, plasma	Ingestion	a) 261.5+/-126.9-253.5+/-90.3 ng/ml b) 261.1+/-120.9-271.7+/-95.9 ng/ml c) 38.3+/-24.2-30.8+/-15.8 ng/ml	a) Not given b) Not given c) Not given	a) Day 14 and 28 of treatment with 5 mg 3X/d b) Metabolite, desmethyldiazepam, d 14 and 28 c) Metabolite, oxazepam Ranges of means, 16 cases, 15 in c). 5 wk trial, placebo washout during wk 1. Anxiety ratings scored during trial. 19-58 yr old outpatients under treatment for anxiety disorder Mild to moderate drowsiness in eight cases, tending to diminish with time. Depression in three Ataxia in six cases HPLC

BLOOD PLASMA; DELIBERATE EXPOSURE; DISEASES; DRUG THERAPY; DRUGS; PSYCHOTROPIC DRUGS; DIAZEPAMS; BROMINE ORGANIC COMPOUNDS; METABOLITES
Fontaine, R.; Annable, L.; Chouinard, G.; Ogilvie, R.I. 1983 Journal of Clinical Psychopharmacology 3(2):80-87

2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-1-methyl-5-phenyl-
439-14-5
C16-H13-Cl-N2-O
MW 284.76, MP 125-126 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11206 Blood, plasma	11	a) 52.1-96.6 ng/ml b) 58.2-75.6 ng/ml c) 66.0-374.0 ng/ml d) 54.0-158.0 ng/ml	a) 67.5+/-3.6 ng/ml b) 67.1+/-3.5 ng/ml c) 156.0+/-46.0 ng/ml d) 91.0+/-15.0 ng/ml S.E.	a) Diazepam, obese subjects, 6 cases, mean wt 92+/-4 kg b) Controls, 5 cases, mean wt 60+/-5 kg c) Active metabolite desmethyldiazepam, same group as a) d) Desmethyldiazepam, same group as b) Mean steady state levels after 2 mg nightly for 30 nights. Significant difference in accumulation and elimination half life after multiple and single doses. Mean age 32+/-3 yr GC-EC

BLOOD PLASMA; DELIBERATE EXPOSURE; BENZODIAZEPINES; DRUGS; ANTIDEPRESSIVE AGENTS; OBESITY; METABOLITES
Abernethy, D.R.; Greenblatt, D.J.; Divoll, M.; Shader, R.I. 1983 Journal of Clinical Pharmacology 23:469-476

Tissue	Cases Exposure Route	Range	Mean	General Information
11207 Blood, plasma	2 Ingestion	a) 1.85-0 umol/l b) 0.7-0 umol/l c) 2.2-0 umol/l d) 1.05-0 umol/l	a) Not given b) Not given c) Not given d) Not given	a) Case No. 1, 7 d before-10 d after last dose b) Case No. 3, 5 d before-2 d after last dose c) Same as a), desmethyldiazepam d) Same as b), desmethyldiazepam Dosage was reduced gradually to 0 within 2 weeks. Symptoms decreased with time, but had not disappeared 4-6 mo later. Some subjects were switched from lorazepam to diazepam before withdrawal. Data representative of 12 subjects. Patients, 31-72 yr, suffering severe withdrawal symptoms after long-term (3-22 hr) therapeutic doses of benzodiazepines 47 symptoms listed, including psychological central nervous system, gastrointestinal, cardiovascular, respiratory, urogenital, endocrine, and miscellaneous

BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; CASE HISTORIES; BEHAVIOR DISORDERS; DEPRESSION; GASTROINTESTINAL DISEASES; NEUROLOGIC MANIFESTATIONS; PSYCHOTROPIC DRUGS; BENZODIAZEPINES; DRUGS
Ashton, H. 1984 British Medical Journal 288:1135-1140

Tissue	Cases Exposure Route	Range	Mean	General Information
11208 Blood, plasma				Review. Pharmacokinetic properties and metabolism of benzodiazepines, relating differences among drugs to differences in clinical action. Use as marker compounds for evaluation of changes in metabolising capacity in old age discussed.

BLOOD PLASMA; DELIBERATE EXPOSURE; AGE; ADULTS; DRUGS; BENZODIAZEPINES; REVIEW; DIAZEPAMS; METABOLISM; METABOLITES; BIOAVAILABILITY; BIOACCUMULATION
Greenblatt, D.J.; Divoll, M.; Abernethy, D.R.; Ochs, H.R.; Shader, R.I. 1983 Drug Metabolism Reviews 14(2):351-393

2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-1-methyl-5-phenyl-
439-14-5
C16-H13-Cl-N2-O
MW 284.76, MP 135-136 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11200 Blood, serum	6 Injection	a) 420-7.2 ng/ml b) 4.8-24 ng/ml	a) Not given b) Not given	a) 0-7 days, 58 ng/ml on day 1 b) Desmethyldiazepam, 0-7 d, 28 ng/ml on day 1, 38 ng/ml on days 3 and 4 7.5 mg IV. Data from one rerpresentative subject. Estimated from graph. Also given with 80 mg 3X/d propranolol, which reduced clearance and prolonged half life. Healthy adults, 18-28 yr GC-EC
BLOOD SERUM; DELIBERATE EXPOSURE; ADOLESCENTS; ADULTS; DRUGS; DRUG INTERACTION; BENZODIAZEPINES; ANTIHYPERTENSIVE AGENTS; BETA BLOCKER; COMPARATIVE EVALUATIONS; DIAZEPAMS; METABOLITES Ochs, H.R.; Greenblatt, D.J.; Verburg-Ochs, B. 1984 Clinical Pharmacology and Therapeutics 36(4):451-455				

Tissue	Cases Exposure Route	Range	Mean	General Information
11800 Saliva	6 Ingestion	a) 4.5-3 ng/ml b) 1.8-2.8 ng/ml	a) Not given b) Not given	a) 1 and 48 hr after 10 mg valium tablet. Peak 5 ng/ml at 2 hr b) 1 and 48 hr after 10 mg controlled release valium CR capsules. Peak 4.9 at 3 hr 21-25 yr old healthy volunteers Bioassay
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; TRANQUILIZERS; DRUGS; COMPARATIVE EVALUATIONS; MEASUREMENT METHODS; DIAZEPAMS Tuomisto, J.; Tuomainen, P.; Saano, V. 1984 Acta Pharmacologica et Toxicologica 55:50-57				

Tissue	Cases Exposure Route	Range	Mean	General Information
11301 Urine	1 Ingestion	Not applicable	0.32 mg/L	Died 2 hr after unknown intake of multiple drugs, including trazodone and ethanol. 31 yr old male with chronic depression Combined drug toxicity with pulmonary congestion, hemorrhage, edema, cerebral edema HPLC
CASE HISTORIES; DELIBERATE EXPOSURE; AUTOPSIES; SUICIDE; ANTIDEPRESSIVE AGENTS; DRUGS; DRUG ABUSE; BLOOD; URINE Root, I.; Ohlson, G.B. 1984 Journal of Analytical Toxicology 8:91-94				

2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-1-methyl-5-phenyl-
439-14-5
C16-H13-Cl-N2-O
MW 284.76, MP 125-126 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11802 Urine	6 Ingestion	a) 248-458 ug/d b) 375-781 ug/d c) 4521-14570 ug/d d) 6287-17691 ug/d	a) 367+/-80 ug/d b) 469+/-134 ug/d c) 10650+/-4101 ug/d d) 13330+/-4242 ug/d	a) 6-Beta-OH-cortisol metabolite b) 6-Beta-OH-cortisol metabolite after ranitidine treatment (150 mg b.i.d.) c) 17-OH-corticosteroid metabolite d) 17-OH-corticosteroid metabolite after ranitidine treatment (150 mg b.i.d.) All had 5 mg diazepam/d for 10 d. Healthy volunteers, 27-37 yr old RIA
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; GERMANY; GASTROINTESTINAL DISEASES; BEHAVIOR DISORDERS; BENZODIAZEPINES; DRUG INTERACTION; DRUGS; DRUG THERAPY; TRANQUILIZERS; DIAZEPAMS; BIOACCUMULATION; METABOLITES Klotz, U.; Reimann, I.W.; Ohnhaus, E.E. 1983 European Journal of Clinical Pharmacology 24:357-360				

2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-3-hydroxy-1-methyl-5-phenyl-
846-50-4
C16-H13-Cl-N2-O2
MW 300.76

Tissue	Cases Exposure Route	Range	Mean	General Information
11808 Blood, plasma	9 Ingestion	a) 326-1002 ng/ml b) 367-849 ng/ml	a) 560 ng/ml b) 496 ng/ml	a) Range of peaks 1-4 hr (mean 2.1 hr) after 30 mg dose b) 0.75-6.0 hr (mean 2.0 hr) after 30 mg, with coadministration of 300 mg cimetidine/6 hr during study Differences between a) and b) insignificant. Cimetidine had no influence on pattern of absorption, distribution or clearance. Healthy 21-67 yr old volunteers GC
BLOOD PLASMA; DELIBERATE EXPOSURE; HYPNOTICS; DRUGS; DRUG INTERACTION Greenblatt, D.J.; Abernethy, D.R.; Divoll, M.; Locniskar, A.; Harmatz, J.S.; Shader, R.I. 1984 Journal of Pharmaceutical Sciences 73(3):399-401				

Tissue	Cases Exposure Route	Range	Mean	General Information
11804 Blood, plasma	20 Ingestion	a) Not given b) Not given c) 550-85 ng/ml d) 500-33 ng/ml	a) 688+/-256 ng/ml b) 561+/-193 ng/ml c) Not given d) Not given	a) Peak levels, at 1.75+/-1.08 hr, controls b) Peak levels, at 1.55+/-0.44 hr, oral contraceptive users c) At 1.5 and 36 hr, controls, range of means d) At 3 and 36 hr, oral contraceptive users, range of means After single 30 mg dose, c) and d) estimated from graph. Healthy adult volunteers, 19.6-22.2 yr, 52.1-68.9 kg GC-EC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; BENZODIAZEPINES; DRUG INTERACTION; HYPNOTICS; METABOLISM; DRUGS Stoehr, G.P.; Kroboth, P.D.; Juhl, R.P.; Wender, D.B.; Phillips, J.P.; Smith, R.B. 1984 Clinical Pharmacology and Therapeutics 36(5):683-690				

2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-3-hydroxy-1-methyl-5-phenyl-
846-50-4
C16-H13-Cl-N2-O2
MW 300.76

Tissue	Cases Exposure Route	Range	Mean	General Information
11805 Blood, plasma	a) 5 b) 5 c) 5 d) 5 e) 5 f) 5 Ingestion	a) 384.6-851.3 ng/ml b) 436.3-725.8 ng/ml c) 276.3-851.3 ng/ml d) 437.8-901.9 ng/ml e) 153.7-632.1 ng/ml f) 490.8-929.5 ng/ml	a) 607.8 ng/ml b) 616.4 ng/ml c) 566.4 ng/ml d) 753.5 ng/ml e) 496.8 ng/ml f) 694.3 ng/ml	a) Young men, peak at 1.70 hr b) Young women, peak at 2.2 hr c) Middle-aged men, peak at 3.1 hr d) Middle-aged women, peak at 2.4 hr e) Elderly men, peak at 2.3 hr f) Elderly women, peak at 2.3 hr 30 mg oral. Elimination half life in elderly women increased. Healthy volunteers, 15 males, 15 females, 20-76 yr old GC-EC

BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; BEHAVIOR DISORDERS; HYPNOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; BENZODIAZEPINES; AGE; SEX

Smith, R.B.; Divoll, M.; Gillespie, W.R.; Greenblatt, D.J. 1983 Journal of Clinical Physchopharmacy 3(3):172-176

Tissue	Cases Exposure Route	Range	Mean	General Information
11806 Blood, plasma	12 Ingestion	227+/-92 ng/ml	Not applicable	Peak, 1.2+/-0.9 hr after 10 mg. Healthy volunteers GC

BLOOD PLASMA; DELIBERATE EXPOSURE; NETHERLANDS; ADULTS; DRUG THERAPY; DRUGS; HYPNOTICS; TRANQUILIZERS; DIAZEPAMS; BIOACCUMULATION; BENZODIAZEPINES

Jochemsen, R.; van Boxtel, C.J.; Hermans, J.; Breimer, D.D. 1983 Clinical Pharmacology and Therapeutics 34(1):42-47

Tissue	Cases Exposure Route	Range	Mean	General Information
11807 Blood, plasma				Review. Pharmacokinetic properties and metabolism of benzodiazepines, relating differences among drugs to differences in clinical action. Use as marker compounds for evaluation of changes in metabolising capacity in old age discussed.

BLOOD PLASMA; DELIBERATE EXPOSURE; AGE; ADULTS; DRUGS; BENZODIAZEPINES; REVIEW; DIAZEPAMS; METABOLISM; METABOLITES; BIOAVAILABILITY; BIOACCUMULATION

Greenblatt, D.J.; Divoll, M.; Abernethy, D.R.; Ochs, H.R.; Shader, R.I. 1983 Drug Metabolism Reviews 14(2):251-292

2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-3-hydroxy-1-methyl-5-phenyl-
846-50-4
C16-H13-Cl-N2-O2
MW 300.76

Tissue	Cases Exposure Route	Range	Mean	General Information
11306 Blood, serum	10 Ingestion	a) 227-841 ng/ml b) 17-132 ng/ml c) 8-85 ng/ml	a) 456+/-65 ng/ml b) 51+/-13 ng/ml c) 30+/-10 ng/ml S.E.	a) Peak, 0.5-3.0 hr after single 20 mg dose b) Steady-state, 24 hr after 6th daily 20 mg dose c) 24 hr after 1st 20 mg dose, estimated from graph Drug produced intermediate degree of accumulation with multiple dosage. Healthy adults, 22-30 yr, 55-85 kg GC-EC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; HYPNOTICS; BIOACCUMULATION; DRUGS Ochs, H.R.; Greenblatt, D.J.; Heuer, H. 1984 Journal of Clinical Pharmacology 24:58-64				

2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-3-hydroxy-5-phenyl-
604-75-1
C15-H11-Cl-N2-O2
MW 286.74, MP 205-206 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11309 Blood	1	Not applicable	3.3 mg/l	Multiple-drug related death, 1979-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Tissue	Cases Exposure Route	Range	Mean	General Information
11310 Blood, plasma	8 Ingestion	a) Not given b) Not given c) 450-38 mg/ml d) 560-40 ng/ml	a) 537+/-92 ng/ml b) 509+/-74 ng/ml c) Not applicable d) Not applicable S.E.	a) Control, peak, at 2.31+/-0.35 hr b) With cimetidine, peak, at 3.25+/-0.48 hr c) Control, at 4 and 48 hr, 1 case d) With cimetidine, at 4 and 48 hr, 1 case 30 mg dose, c) and d) times and levels estimated from graph Healthy adults, 23-44 yr, no other medications GC-EC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; DRUG INTERACTION; BENZODIAZEPINES; METABOLISM; METABOLITES Greenblatt, D.J.; Abernethy, D.R.; Koepke, H.H.; Shader, R.I. 1984 Journal of Clinical Pharmacology 24:187-193				

2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-3-hydroxy-5-phenyl-
604-75-1
C15-H11-Cl-N2-O2
MW 286.74, MP 205-206 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11811 Blood, plasma	9 Ingestion	a) 164+/-35-34+/-8 ng/ml b) 133+/-27-20+/-2 ng/ml c) 89+/-17-26+/-6 ng/ml d) Not given	a) Not applicable b) Not applicable c) Not applicable d) 485+/-48 ng/ml	a) Normal diet, 0-48 hr, peak (496+/-72 ng/ml) at 3.1+/-1.1 hr b) Brussels sproute-cabbage containing diet (test diet), 0-48 hr, peak (485+/-68 ng/ml) at 3.6+/-0.3 hr c) Normal diet, 0-48 hr, peak (526+/-62 ng/ml) at 3.8+/-0.2 hr d) Maximum oxazepam glucuronide metabolite level, at 5.1+/-0.1 hr, test diet Dose, 45 mg. Test diet caused 17% decrease in mean plasma AUC. Healthy volunteers, nonsmokers HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; DRUG INTERACTION; BIOACCUMULATION; FOODS; METABOLISM; METABOLITES; DRUGS Pantuck, E.J.; Pantuck, C.B.; Anderson, K.E.; Wattenberg, L.W.; Conney, A.H.; Kappas, A. 1984 Clinical Pharmacology and Therapeutics 35(2):161-169				

Tissue	Cases Exposure Route	Range	Mean	General Information
11812 Blood, plasma	1 Ingestion	6-400 ng/ml	Not given	About 1 and 3 hr after 30 mg dose, in subject taking low-dose estrogen oral contraceptives. 7 ng/ml at 48 hr Study compared kinetics in 17 OC recipients and 14 controls. Metabolic clearance, elimination and free fraction in plasma similar in the two groups. Values and time points estimated from figure. Healthy 19-37 yr olds with similar smoking habits GLC
BLOOD PLASMA; DELIBERATE EXPOSURE; BENZODIAZEPINES; DRUGS; COMPARATIVE EVALUATIONS; ORAL CONTRACEPTIVES; DRUG INTERACTION; METABOLISM Abernethy, D.R.; Greenblatt, D.J.; Ochs, H.R.; Weyers, D.; Divoll, M.; Harmatz, J.S.; Shader, R.I. 1983 Clinical Pharmacology and Therapeutics 33(5):628-631				

Tissue	Cases Exposure Route	Range	Mean	General Information
11813 Blood, plasma				Review. Pharmacokinetic properties and metabolism of benzodiazepines, relating differences among drugs to differences in clinical action. Use as marker compounds for evaluation of changes in metabolizing capacity in old age discussed.
BLOOD PLASMA; DELIBERATE EXPOSURE; AGE; ADULTS; DRUGS; BENZODIAZEPINES; REVIEW; DIAZEPAMS; METABOLISM; METABOLITES; BIOAVAILABILITY; BIOACCUMULATION Greenblatt, D.J.; Divoll, M.; Abernethy, D.R.; Ochs, H.R.; Shader, R.I. 1983 Drug Metabolism Reviews 14(2):251-292				

2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-3-hydroxy-5-phenyl-
604-75-1
C15-H11-Cl-N2-O2
MW 286.74, MP 205-206 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11814 Urine	9 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 110.4+/-8.9 umol b) 115.2+/-4.9 umol c) 110.1+/-4.5 umol d) 36.0+/-2.1 umol e) 40.4+/-5.5 umol f) 38.1+/-5.1 umol	a) (+)-oxazepam glucuronide, 48 hr, normal diet b) (+)-oxazepam glucuronide, 48 hr, test diet c) (+)-oxazepam glucuronide, 48 hr normal diet following test diet e) (-)-oxazepam glucuronide, 48 hr, normal diet e) (-)-oxazepam glucuronide, 48 hr, test diet f) (-)-oxazepam glucuronide, 48 hr, normal diet following test diet Dose was 157 umol. Test diet contained brussels sprouts-cabbage. Healthy volunteers, nonsmokers HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; DRUG INTERACTION; BIOACCUMULATION; FOODS; METABOLISM; METABOLITES; DRUGS Pantuck, E.J.; Pantuck, C.B.; Anderson, K.E.; Wattenberg, L.W.; Conney, A.H.; Kappas, A. 1984 Clinical Pharmacology and Therapeutics 35(2):161-169				

2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-phenyl-
1088-11-5
C15-H11-Cl-N2-O
MW 270.73

Tissue	Cases Exposure Route	Range	Mean	General Information
11815 Blood	a) 1 b) 1 Ingestion	a) Not applicable b) Not applicable	a) 0.68 mg/L b) 0.20 mg/L	a) Female, collapsed 2 hr after ingesting 4-6 g trazadone, survived b) Male, died 2 hr after unknown intake of multiple drugs, including trazadone and ethanol. 49 yr old female, 31 yr old male, with chronic depression In b) Combined drug toxicity with pulmonary congestion, hemorrhage, edema, cerebral edema HPLC
CASE HISTORIES; DELIBERATE EXPOSURE; AUTOPSIES; SUICIDE; ANTIDEPRESSIVE AGENTS; DRUGS; DRUG ABUSE; BLOOD; URINE Root, I.; Ohlson, G.B. 1984 Journal of Analytical Toxicology 8:91-94				

Tissue	Cases Exposure Route	Range	Mean	General Information
11816 Blood	a) 1 b) 52 c) 15	a) Not applicable b) 0.1-7.2 mg/l c) 0.10-3.2 mg/l	a) 0.9 mg/l b) 0.9 mg/l c) 0.66+/-0.75 mg/l	a) Single-drug death, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths, 1975-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-phenyl-
1088-11-5
C16-H11-Cl-N2-O
MW 270.75

Tissue	Cases Exposure Route	Range	Mean	General Information
11817 Blood, plasma	10	a) 5-25 ng/ml b) 4-30 ng/ml	a) Not given b) Not given	a) Metabolite, at end of, and 5 d after, IV 10 mg diazepam. Level at 7 d was 15 ng/ml b) At end of, and 3 d after, IV 10 mg diazepam, during concurrent administration of 150 mg/12 hr ranitidine. Level at 7 d was 18 ng/ml Crossover study. Range of levels shown for only one subject. Some values estimated from figure. Healthy 21-39 yr old subjects GC-EC
BLOOD PLASMA; DELIBERATE EXPOSURE; ANTIPYRETICS; TRANQUILIZERS; DRUG INTERACTION; DRUGS; METABOLISM; METABOLITES Abernethy, D.R.; Greenblatt, D.J; Scheiman, P.N.; Shader, R.I. 1984 Clinical Pharmacology and Therapeutics 35(2):188-192				

Tissue	Cases Exposure Route	Range	Mean	General Information
11818 Blood, plasma	10 Ingestion	a) Not given b) Not given	a) 453 ng/ml b) 626 ng/ml	a) Metabolite, after 2 wk (baseline) period, mean daily dose 15.8 mg b) Same as a), with 1200 mg cimetidine/d added to regimen Part of 8 wk study, in long-term users. After base-line period, patients took either cimetidine or placebo for 2 wk, then the other treatment, while continuing diazepam. In final 2 wk, only diazepam was ingested. Levels at end of placebo period and of final 2-wk period same as, or near, baseline levels. No significant changes in performance on psychomotor and intellectual tests given during each phase. During b), self-ratings indicated deeper sleep and reduction in sleep latency. 24-40 yr olds using diazepam 7 mo-15 yr GLC
BLOOD PLASMA; DELIBERATE EXPOSURE; BEHAVIOR DISORDERS; DRUGS; DRUG INTERACTION; TRANQUILIZERS; METABOLISM Greenblatt, D.J.; Abernethy, D.R.; Morse, D.S.; Harmatz, J.S.; Shader, R.I. 1984 New England Journal of Medicine 310(25):1639-1643				

Tissue	Cases Exposure Route	Range	Mean	General Information
11819 Urine	1 Ingestion	Not applicable	0.32 mg/L	Died 2 hr after unknown intake of multiple drugs, including trazadone and ethanol. 31 yr old male with chronic depression Combined drug toxicity with pulmonary congestion, hemorrhage, edema, cerebral edema HPLC
CASE HISTORIES; DELIBERATE EXPOSURE; AUTOPSIES; SUICIDE; ANTIDEPRESSIVE AGENTS; DRUGS; DRUG ABUSE; BLOOD; URINE Root, I.; Ohlson, G.B. 1984 Journal of Analytical Toxicology 8:91-94				

2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-phenyl-1-(2,2,2-trifluoroethyl)-
28082-17-8
C17-H12-Cl-F3-N2-O

Tissue	Cases Exposure Route	Range	Mean	General Information
11820 Blood, plasma	11 Ingestion	a) Not given b) Not given	a) 187+/-46 ng/ml b) 1404+/-264 ng/ml	a) Maximum after 7 doses b) N-desalkyl metabolite, maximum after 21 doses Subjects given 40 mg SXd for 14 d. Parent compound steady-state levels (77 ng/ml) reached by third day, metabolite steady-state (1386 ng/ml) by day 11. Healthy volunteers, 19-35 yr old GC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; BEHAVIOR DISORDERS; SEDATIVES; TRANQUILIZERS; BIOACCUMULATION; BIOAVAILABILITY; METABOLITES; DRUGS Chang, M.; Hilbert, J.M.; Gural, R.P.; Radwanski, E.; Symchowicz, S.; Zampaglione, N. 1984 Clinical Pharmacology and Therapeutics 35(6):838-842				

2H-1,4-Benzodiazepin-2-one, 7-chloro-5-(o-chlorphenyl)-1,3-dihydro-3-hydroxy- (8 CI); 2H-1,4-Benzodiazepin-2-one, 7-chloro-5-(2-chlorophenyl)-1,3-dihydro-3-hydroxy- (9 CI)
848-48-1
C15-H10-Cl2-N2-O2
MW 321.16, MP 166-168 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11821 Blood	1 Ingestion	Not given	<0.1 ug/ml	Autopsy. Dose unknown. Combined levels of ethanol, methanol, isopropanol <5 mg/dl. Data also for clomipramine, somepirac, caffeine, salicylates, acetaminophen, indomethacin, oxycodone. 57 yr old treated for depression, joint pain. Excessive drinking on occasion. Confusion, weakness, intoxication, death. Death due to clomipramine toxicity. TLC
AUTOPSIES; BEHAVIOR DISORDERS; NEUROLOGIC MANIFESTATIONS; BLOOD; URINE; ANTIDEPRESSIVE AGENTS; ANALGESICS; DRUGS; DRUG ABUSE; ALCOHOLS; METABOLITES; CASE HISTORIES; DELIBERATE EXPOSURE Weatherall, R.C.; Gusy, D.R.P.; Chalmers, J.L.; Keenan, J.R. 1983 Journal of Analytical Toxicology 7:166-171				

Tissue	Cases Exposure Route	Range	Mean	General Information
11822 Blood, plasma	24 Ingestion Injection	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 16+/-2 ng/ml b) 15+/-1 ng/ml c) 14+/-1 ng/ml d) 17+/-3 ng/ml e) 21+/-3 ng/ml S.E.	a) 6 subjects, normal b) 6 subjects, renal impairment c) 4 subjects, chronic dialysis d) 4 subjects, normal e) 4 subjects, renal impairment Maximum concentrations. Single oral and IV doses of 1.5 or 3 mg 1 mo apart in a), b), and c). Multiple doses, 0.5 mg orally 3 times/d for 5 d in d) and e). Fecal levels negligible. Kinetics of glucuronide (metabolite) markedly affected by renal dysfunction. Adults, 25-69 yr, 56-100 kg GC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; DRUG THERAPY; BENZODIAZEPINES Morrison, G.; Chiang, S.T.; Koephe, H.H.; Walker, B.R. 1984 Clinical Pharmacology and Therapeutics 35(5):646-652				

2H-1,4-Benzodiazepin-2-one, 7-chloro-5-(o-chlorphenyl)-1,3-dihydro-3-hydroxy- (8 CI); 2H-1,4-Benzodiazepin-2-one, 7-chloro-5-(2-chlorophenyl)-1,3-dihydro-3-hydroxy- (9 CI)
846-49-1
C16-H10-Cl2-N2-O2
MW 321.16, MP 166-168 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11828 Blood, plasma	6 Ingestion	a) Not given b) Not given c) 80-4.3 ng/ml d) 83-5.9 ng/ml	a) 27.5+/-3.5 ng/ml b) 24.2+/-2.9 ng/ml c) Not applicable d) Not applicable S.E.	a) Control, peak, at 1.18+/-0.38 hr b) With cimetidine, peak, at 0.92+/-0.58 hr c) Control, at 0.75 and 32 hr, 1 case d) With cimetidine, at 1 and 32 hr, 1 case Single 2-mg dose, c) and d) times and levels estimated from graph Healthy adults, 28-44 yr, no other medications GC-EC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; DRUG INTERACTION; BENZODIAZEPINES; METABOLISM; METABOLITES Greenblatt, D.J.; Abernethy, D.R.; Koepke, H.H.; Shader, R.I. 1984 Journal of Clinical Pharmacology 24:187-193				

Tissue	Cases Exposure Route	Range	Mean	General Information
11824 Blood, plasma	10 Injection	a) 55-2 ng/ml b) 48-2 ng/ml	a) Not given b) Not given	a) At end of, and 36 hr after, 2 mg IV b) Same as a), during concurrent oral administration of 150 mg/12 hr ranitidine Crossover study. Range of levels shown for only one subject. No significant effect of ranitidine on lorazepam disposition. Some values estimated from figure. Healthy 21-37 yr old subjects GC-EC
BLOOD PLASMA; DELIBERATE EXPOSURE; ANTIPYRETICS; TRANQUILIZERS; DRUG INTERACTION; DRUGS; METABOLISM; METABOLITES Abernethy, D.R.; Greenblatt, D.J; Echelman, F.N.; Shader, R.I. 1984 Clinical Pharmacology and Therapeutics 35(2):188-192				

Tissue	Cases Exposure Route	Range	Mean	General Information
11826 Blood, plasma	20 Ingestion	a) Not given b) Not given c) 25-5.9 ng/ml d) 26-4.8 ng/ml	a) 26.7+/-4.5 ng/ml b) 26.4+/-2.8 ng/ml c) Not given d) Not given	a) Peaks, at 2.1+/-0.6 hr, controls b) Peaks, at 1.8+/-0.7 hr, oral contraceptive users c) At 3 and 36 hr, controls, range of means d) At 2 and 36 hr, oral contraceptive users, range of means After single 2 mg dose, c) and d) estimated from graph. Healthy adult volunteers, 18.6-28.8 yr, 48.5-61.0 kg GC-EC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; BENZODIAZEPINES; DRUG INTERACTION; HYPNOTICS; METABOLISM; DRUGS Stoehr, G.P.; Kroboth, P.D.; Juhl, R.P.; Wender, D.B.; Phillips, J.P.; Smith, R.B. 1984 Clinical Pharmacology and Therapeutics 36(5):683-690				

2H-1,4-Benzodiazepin-2-one, 7-chloro-5-(o-chlorphenyl)-1,3-dihydro-3-hydroxy- (8 CI); 2H-1,4-Benzodiazepin-2-one, 7-chloro-5-(2-chlorophenyl)-1,2-dihydro-3-hydroxy- (9 CI)
846-49-1
C15-H10-Cl2-N2-O2
MW 321.16, MP 166-168 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11826 Blood, plasma	1 Injection	50-1.8 ng/ml	Not given	About 2 and 48 hr after 2 mg dose IV, in subject taking low-dose estrogen oral contraceptives Study compared kinetics in 15 OC recipients and 15 controls. Metabolic clearance, elimination, free-fraction in plasma similar in groups. Estimated from figure. Healthy 19-37 yr olds with similar smoking habits GLC

BLOOD PLASMA; DELIBERATE EXPOSURE; BENZODIAZEPINES; DRUGS; COMPARATIVE EVALUATIONS; ORAL CONTRACEPTIVES; DRUG INTERACTION; METABOLISM

Abernethy, D.R.; Greenblatt, D.J.; Ochs, H.R.; Weyers, D.; Divoll, M.; Harmatz, J.S.; Shader, R.I. 1983 Clinical Pharmacology and Therapeutics 33(5):626-631

Tissue	Cases Exposure Route	Range	Mean	General Information
11827 Blood, plasma				Review. Pharmacokinetic properties and metabolism of benzodiazepines, relating differences among drugs to differences in clinical action. Use as marker compounds for evaluation of changes in metabolizing capacity in old age discussed.

BLOOD PLASMA; DELIBERATE EXPOSURE; AGE; ADULTS; DRUGS; BENZODIAZEPINES; REVIEW; DIAZEPAMS; METABOLISM; METABOLITES; BIOAVAILABILITY; BIOACCUMULATION

Greenblatt, D.J.; Divoll, M.; Abernethy, D.R.; Ochs, H.R.; Shader, R.I. 1983 Drug Metabolism Reviews 14(2):351-392

Tissue	Cases Exposure Route	Range	Mean	General Information
11828 Blood, serum	9 Injection	a) 24-2.9 ng/ml	a) Not given	2-48 hr, 2 mg IV. Data from one representative subject. Estimated from graph. Also given with 80 mg 3X/d propranolol, with no significant effects. Healthy adults, 18-26 yr GC-EC

BLOOD SERUM; DELIBERATE EXPOSURE; ADOLESCENTS; ADULTS; DRUGS; DRUG INTERACTION; BENZODIAZEPINES; ANTIHYPERTENSIVE AGENTS; BETA BLOCKER; COMPARATIVE EVALUATIONS; DIAZEPAMS; METABOLITES

Ochs, H.R.; Greenblatt, D.J.; Verburg-Ochs, b. 1984 Clinical Pharmacology and Therapeutics 36(4):451-455

2H-1,4-Benzodiazepin-2-one, 7-chloro-5-(o-chlorphenyl)-1,3-dihydro-3-hydroxy- (8 CI); 2H-1,4-Benzodiazepin-2-one, 7-chloro-5-(2-chlorophenyl)-1,3-dihydro-3-hydroxy- (9 CI)
846-49-1
C15-H10-Cl2-N2-O2
MW 321.16, MP 166-168 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11829 Urine	1 Ingestion	Not given	<0.1 ug/ml	Autopsy. Dose unknown. Combined levels of ethanol, methanol, isopropanol <5 mg/dl. Data also for clomipramine, somepirac, caffeine, salicylates, acetaminophen, indomethacin, oxycodone. 57 yr old treated for depression, joint pain. Excessive drinking on occasion. Confusion, weakness, intoxication, death. Death due to clomipramine toxicity. TLC
AUTOPSIES; BEHAVIOR DISORDERS; NEUROLOGIC MANIFESTATIONS; BLOOD; URINE; ANTIDEPRESSIVE AGENTS; ANALGESICS; DRUGS; DRUG ABUSE; ALCOHOLS; METABOLITES; CASE HISTORIES; DELIBERATE EXPOSURE Weatherall, R.C.; Guay, D.R.P.; Chalmers, J.L.; Keenan, J.R. 1983 Journal of Analytical Toxicology 7:168-171				

2H-1,4-Benzodiazepine-2-thione, 7-chloro-5-(2-fluorophenyl)-1,3-dihydro-1-(2,2,2-trifluoroethyl)-
86785-23-5
C17-H11-Cl-F4-N2-S

Tissue	Cases Exposure Route	Range	Mean	General Information
11830 Blood, plasma	4 Ingestion	a) 14.6-29.7 ng/ml b) 5.5-12.8 ng/ml c) 14.1-24.7 ng/ml d) 28-1.7 ng/ml e) 10-1.2 ng/ml f) 17.5-15 ng/ml	a) 21.6 ng/ml b) 10.4 ng/ml c) 21.0 ng/ml d) Not given e) Not given f) Not given	a) Peak levels, at 2.0-3.0 hr b) Peak 2-oxoquazepam metabolite levels, at 2.0-3.0 hr c) Peak N-desalkyl-2-oxoquazepam metabolite levels, at 4.0-12.0 hr d) At 4 and 24 hr e) 2-oxoquazepam, at 4 and 24 hr f) N-desalkyl-2-oxoquazepam, at 12 and 48 hr After single 15 mg dose, d)-f) range of means, estimated from graph. Healthy nonpregnant, lactating volunteers, 26-32 yr, 56.8-60.9 kg, 150-157 cm height, no other medications GC-EC
BLOOD PLASMA; MILK; DELIBERATE EXPOSURE; ADULTS; BENZODIAZEPINES; DRUGS; HYPNOTICS; METABOLITES; LACTATION Hilbert, J.M.; Gural, R.P.; Symchowicz, S.; Zampaglione, N. 1984 Journal of Clinical Pharmacology 24:457-462				

Tissue	Cases Exposure Route	Range	Mean	General Information
11831 Blood, plasma	10 Ingestion	a) Not given b) Not given c) Not given	a) 29.3+/-9.1 ng/ml b) 14.5+/-5.5 ng/ml c) 15.2+/-2.6 ng/ml	a) Maximum at 2.7+/-2.0 hr after 15 mg b) 2-oxy metabolite, maximum concentration at 3.0+/-1.9 hr after 15 mg c) N-desalkyl-2-oxo metabolite, maximum at 42.8+/-24.9 hr after 15 mg Increased half life of N-desalkyl-2-oxoquazepam in elderly. 6 males, 4 females, 65-77 yr old, healthy volunteers GLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; HYPNOTICS; BIOACCUMULATION; AGE; METABOLITES Hilbert, J.M.; Chung, M.; Radwanski, E.; Gural, R.; Symchowicz, S.; Zampaglione, N. 1984 Clinical Pharmacology and Therapeutics 36(4):566-569				

2H-1,4-Benzodiazepine-2-thione, 7-chloro-5-(2-fluorophenyl)-1,3-dihydro-1-(2,2,2-trifluoroethyl)-
56735-22-5
C17-H11-Cl-F4-N2-S

Tissue	Cases Exposure Route	Range	Mean	General Information
11882 Blood, plasma	12 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 21.0+/-15.2 ng/ml b) 52.2+/-9.7 ng/ml c) 9.1+/-4.0 ng/ml d) 13.5+/-2.8 ng/ml	a) 2.5+/-1.1 hr after morning dose, parent drug b) 2.6+/-1.0 hr after bedtime dose, p<=0.05 c) Metabolite, 2-Oxoquazepam, 2.5+/-1.0 hr after morning dose d) 3.0+/-0.7 hr after bedtime dose, p<=0.05 Peak times and maxima after 15 mg tablet. Back to initial level at 96 hr. 2-way crossover design separated by 1 mo washout period. Healthy 19-36 yr olds (mean 27), 60.8-86.8 kg (mean 71.7), 168-188 cm (mean 180) GLC

BLOOD PLASMA; DELIBERATE EXPOSURE; DRUGS; BENZODIAZEPINES; HYPNOTICS; BIOLOGICAL MONITORING; METABOLITES
Hilbert, J.M.; Chung, M.; Maier, G.; Gural, R.; Symchowicz, S.; Zampaglione, N. 1984 Clinical Pharmacology and Therapeutics 36(1):99-104

Tissue	Cases Exposure Route	Range	Mean	General Information
11888 Milk	4 Ingestion	a) 25.0-216.0 ng/ml b) 15.5-44.0 ng/ml c) 0.0-2.0 ng/ml d) 90-8.5 ng/ml e) 25-1.5 ng/ml f) 2.5-1.5 ng/ml	a) 95.5 ng/ml b) 26.1 ng/ml c) 2.0 ng/ml d) Not given e) Not given f) Not given	a) Peak levels, at 2.0-4.0 hr b) Peak 2-oxoquazepam metabolite levels, at 2.0-4.0 hr c) Peak N-desalkyl-2-oxoquazepam metabolite levels, at 4.0-12.0 hr d) At 6 and 24 hr e) 2-oxoquazepam, at 6 and 24 hr f) N-desalkyl-2-oxoquazepam, at 12 and 48 hr After single 15 mg dose, d)-f) range of means, estimated from graph. Healthy nonpregnant, lactating volunteers, 26-32 yr, 56.8-60.9 kg, 150-157 cm height, no other medications GC-EC

BLOOD PLASMA; MILK; DELIBERATE EXPOSURE; ADULTS; BENZODIAZEPINES; DRUGS; HYPNOTICS; METABOLITES; LACTATION
Hilbert, J.M.; Gural, R.P.; Symchowicz, S.; Zampaglione, N. 1984 Journal of Clinical Pharmacology 24:457-462

3-Heptanone, 6-(dimethylamino)-4,4-diphenyl-
76-99-3
C21-H27-N-O
MW 309.49

Tissue	Cases Exposure Route	Range	Mean	General Information
11884 Bile	2	5.5-7.0 mg/L	6.2 mg/L	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths RIA

(next page)

3-Heptanone, 6-(dimethylamino)-4,4-diphenyl-
76-99-3
C21-H27-N-O
MW 309.49

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
11385 Blood	2	1.0-1.4 mg/L	1.2 mg/L	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths RIA

VITREOUS HUMOR; BLOOD; BRAIN; LIVER; KIDNEYS; BILE; URINE; AUTOPSIES; NARCOTICS; DRUG ABUSE; SEDATIVES; FORENSIC MEDICINE; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; DRUGS; DELIBERATE EXPOSURE
Ziminski, K.R.; Wemyss, C.T.; Bidanset, J.H.; Manning, T.J.; Lukash, L. 1984 Journal of Forensic Sciences 29(3):903-909

Tissue	Cases Exposure Route	Range	Mean	General Information
11386 Blood	a) 18 b) 43 c) 16 d) 6 e) 12	a) 0.07-1.4 mg/l b) 0.05-3.4 mg/l c) 0.10-1.4 mg/l d) 0.07-0.54 mg/l e) 0.2-1.4 mg/l	a) 0.52 mg/l b) 0.47 mg/l c) 0.62+/-0.40 mg/l d) 0.38 mg/l e) 0.59 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths, 1979-1980 d) Single-drug deaths, without ethanol, 1975-1980 e) Single-drug deaths, with ethanol, 1975-1980. Autopsy, Maryland State Medical Examiner's office Death

BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS
Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230

Tissue	Cases Exposure Route	Range	Mean	General Information
11387 Blood, plasma	a) 31 b) 13 Injection	a) 87-40 ng/ml b) 27-25 ng/ml S.E.	a) Not given b) Not given	a) 15 min and 4 hr after IM, deltoid site. 57 ng/ml at 1 hr b) 30 minand 3.5 hr after gluteal IM Ranges of means. Greater analgesic effect from a). Values estimated from figure. Postoperative cancer patients, mean age 52-54, wt 67-69 kg GLC

BLOOD PLASMA; DELIBERATE EXPOSURE; NEOPLASMS; ANALGESICS; DRUG THERAPY; DRUGS; NARCOTICS; COMPARATIVE EVALUATIONS
Grabinski, P.Y.; Kaiko, R.F.; Rogers, A.G.; Houde, R.W. 1983 Journal of Clinical Pharmacology 23:48-55

Tissue	Cases Exposure Route	Range	Mean	General Information
11388 Brain	2	2.0-0.4 mg/kg	1.2 mg/kg	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths RIA

(next page)

2-Heptanone, 6-(dimethylamino)-4,4-diphenyl-
76-99-3
C21-H27-N-O
MW 309.46

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
11839 Kidney	2	2.6-8.0 mg/kg	5.3 mg/kg	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths RIA
11840 Liver	12	1.2-6.0 mg/kg	3.0 mg/kg	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths GC
11841 Vitreous humor	12	26-82 Ng/L	56 Ng/L	Comparative study of drugs in postmortem tissues. Vitreous humor demonstrated as useful substrate which allowed drug determinations in small quantities of biological substances. Autopsies, drug-related deaths RIA
VITREOUS HUMOR; BLOOD; BRAIN; LIVER; KIDNEYS; BILE; URINE; AUTOPSIES; NARCOTICS; DRUG ABUSE; SEDATIVES; FORENSIC MEDICINE; BIOACCUMULATION; BIOINDICATORS; HEALTH HAZARDS; DRUGS; DELIBERATE EXPOSURE Siminski, K.R.; Wemyss, C.T.; Bidanset, J.H.; Manning, T.J.; Lubach, L. 1984 Journal of Forensic Sciences 29(3):908-909				

8-Quinolinecarboxylic acid, 1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-7-(1-piperazinyl)-
86721-26-1
C17-H18-F-N3-O3

Tissue	Cases Exposure Route	Range	Mean	General Information
11842 Blister fluid	6 Injection	0.41+/-0.22-0.10+/-0.05 ug/ml	Not applicable	0.25-24 hr, peak (0.53+/-0.27 ug/ml) at 30 min after 100 mg IV. Healthy volunteers, 28-42 yr old Plate diffusion
BLOOD SERUM; BLISTER FLUID; URINE; DELIBERATE EXPOSURE; UNITED KINGDOM; ADULTS; INFECTION; ANTIBIOTICS; BIOACCUMULATION; DRUGS Wise, R.; Lockley, R.M.; Webberly, M.; Dent, J. 1984 Antimicrobial Agents and Chemotherapy 26(2):208-210				

3-Quinolinecarboxylic acid, 1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-7-(1-piperazinyl)-
85721-33-1
C17-H18-F-N3-O3

Tissue	Cases Exposure Route	Range	Mean	General Information
11845 Blood, plasma	12 Ingestion	a) 0.80+/-0.26-0.11+/-0.07 ug/ml b) 0.58+/-0.20-0.14+/-0.06 ug/ml c) 0.77+/-0.48-0.13+/-0.05 ug/ml d) 1.31+/-0.15-0.15+/-0.05 ug/ml e) 0.93+/-0.36-0.14+/-0.04 ug/ml f) 0.85+/-0.33-0.18+/-0.15 ug/ml g) 1.11+/-0.38-0.16+/-0.07 ug/ml	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given	a) Dose 1 b) Dose 3 c) Dose 5 d) Dose 7 e) Dose 9 f) Dose 11 g) Dose 13 Peak-trough, 1.5 and 12 hr after 250 mg dose. Dose repeated every 12 hr. Ranges of means. Healthy adults, mean 27.5 yr, mean 75 kg HPLC
BLOOD PLASMA; URINE; SALIVA; DELIBERATE EXPOSURE; ADULTS; ANTIBIOTICS; DRUGS Arcuoff, G.E.; Kenner, C.H.; Sloan, R.S.; Pottratz, S.T. 1984 Clinical Pharmacology and Therapeutics 36(3):384-388				

Tissue	Cases Exposure Route	Range	Mean	General Information
11844 Blood, serum	6 Injection	2.1+/-0.7-0.01+/-0.005 ug/ml	Not applicable	0-24 hr, peak (2.1+/-0.7 ug/ml) at 5 min after 100 mg IV. Healthy volunteers, 23-42 yr old Plate diffusion
BLOOD SERUM; BLISTER FLUID; URINE; DELIBERATE EXPOSURE; UNITED KINGDOM; ADULTS; INFECTION; ANTIBIOTICS; BIOACCUMULATION; DRUGS Wise, R.; Lockley, R.M.; Webberly, M.; Dent, J. 1984 Antimicrobial Agents and Chemotherapy 26(2):206-210				

Tissue	Cases Exposure Route	Range	Mean	General Information
11845 Blood, serum	12 Ingestion	a) 1.44+/-0.62-0.32+/-0.06 ug/ml b) 1.28+/-1.07-0.57+/-0.23 ug/ml	a) Not applicable b) Not applicable	a) 0.5-12 hr, peak (1.9+/-0.72 ug/ml) 1 hr after 500 mg b) 0-12 hr, peak (2.62+/-0.81 ug/ml) 1 hr after 500 mg b.i.d. for 7 d. Healthy volunteers, 19-40 yr old, wt 57.3-95.5 kg Well-diffusion
11846 Feces	12 Ingestion	185-2,220 ug/g	891+/-624 ug/g	Level after 500 mg b.i.d. for 7 d. On d 7 coliforms were absent and streptococci and staphylococci levels were reduced. One wk later these levels had returned to pretreatment state. Healthy volunteers, 19-40 yr old, wt 57.3-95.5 kg HPLC
BLOOD SERUM; URINE; FECES; DELIBERATE EXPOSURE; UNITED KINGDOM; ADULTS; INFECTION; ANTIBIOTICS; DRUG THERAPY; DRUGS; BIOACCUMULATION; BIOLOGICAL MONITORING Brumfitt, W.; Franklin, I.; Grady, D.; Hamilton-Miller, J.M.T.; Iliffe, A. 1984 Antimicrobial Agents and Chemotherapy 26(5):757-761				

3-Quinolinecarboxylic acid, 1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-7-(1-piperazinyl)-
85721-33-1
C17-H18-F-N3-O3

Tissue	Cases Exposure Route	Range	Mean	General Information
11847 Saliva	12 Ingestion	a) Not given b) Not given c) Not given	a) 0.38+/-0.15 ug/ml b) 0.31+/-0.12 ug/ml c) 0.29+/-0.12 ug/ml	a) 2 hr after 1st dose b) 2 hr after 7th dose c) 2 hr after 13th dose. Healthy adults, mean 27.3 yr, mean 75 kg HPLC
11848 Urine	12 Ingestion	a) 72-346 ug/ml b) 76-340 ug/ml c) 137-658 ug/ml d) Not given e) Not given f) Not given	a) Not given b) Not given c) Not given d) 44.7+/-25 ug/ml e) 62+/-48 ug/ml f) 68.7+/-45 ug/ml	a) 0-2 hr after 1st dose b) 0-2 hr after 7th dose c) 0-2 hr after 13th dose d) 6-12 hr after 1st dose e) 6-12 hr after 7th dose f) 6-12 hr after 13th dose 250 mg every 12 hr. Collected as 0-2, 2-4, 4-6, and 6-12 hr samples. Healthy adults, mean 27.3 yr, mean 75 kg HPLC
BLOOD PLASMA; URINE; SALIVA; DELIBERATE EXPOSURE; ADULTS; ANTIBIOTICS; DRUGS Aronoff, G.E.; Kenner, C.H.; Sloan, R.S.; Pottratz, S.T. 1984 Clinical Pharmacology and Therapeutics 36(3):384-388				

Tissue	Cases Exposure Route	Range	Mean	General Information
11849 Urine	6 Injection	66.6-96.5%	79.6+/-10.5%	% dose (100 mg IV) recovered in 48 hr. Healthy volunteers, 23-42 yr old Plate diffusion
BLOOD SERUM; BLISTER FLUID; URINE; DELIBERATE EXPOSURE; UNITED KINGDOM; ADULTS; INFECTION; ANTIBIOTICS; BIOACCUMULATION; DRUGS Wise, R.; Lockley, R.M.; Webberly, M.; Dent, J. 1984 Antimicrobial Agents and Chemotherapy 26(2):206-210				

Tissue	Cases Exposure Route	Range	Mean	General Information
11850 Urine	12 Ingestion	a) 10-270 ug/ml b) 13-300 ug/ml c) 11.5-66.2% d) 10.4-76.4%	a) 105+/-85 ug/ml b) 174+/-100 ug/ml c) 38.6% d) 46%	a) Trough, 12 hr after 500 mg b) Trough, 12 hr after 500 mg b.i.d. for 7 d c) % dose excreted, 12 hr after 500 mg d) % dose excreted, 12 hr after 500 mg b.i.d. for 7 d. Healthy volunteers, 19-40 yr old, wt 57.3-95.5 kg HPLC
BLOOD SERUM; URINE; FECES; DELIBERATE EXPOSURE; UNITED KINGDOM; ADULTS; INFECTION; ANTIBIOTICS; DRUG THERAPY; DRUGS; BIOACCUMULATION; BIOLOGICAL MONITORING Brumfitt, W.; Franklin, I.; Grady, D.; Hamilton-Miller, J.M.T.; Iliffe, A. 1984 Antimicrobial Agents and Chemotherapy 26(5):757-761				

3-Quinolinecarboxylic acid, 1-ethyl-6-fluoro-1,4-dihydro-4-oxo-7-(1-piperazinyl)-
70458-96-7
C16-H18-F-N3-O3

Tissue	Cases Exposure Route	Range	Mean	General Information
11551 Blood, plasma	a) 6 b) 3 c) 3 Ingestion	a) 1.35+/-0.39-0.08+/-0.03 ug/ml b) 1.30+/-0.14-0.10+/-0.03 ug/ml c) 1.47+/-0.13-0.15+/-0.03 ug/ml	a) Not given b) Not given c) Not given	a) Healthy volunteers b) Patients with hepatic disease c) With renal disease Ranges of means at 1 and 12 hr after 400 mg dose. Levels at 0.5 hr 0.60+/-0.34, 0.74+/-0.09 and 0.61+/-0.14 ug/ml, respectively. Other pharmacokinetic data presented. Slight differences between groups might become statistically significant with increased sample size. New assay method. Healthy adult volunteers, recovering hepatitis type B patients, and patients with moderate stable chronic renal insuffiency HPLC

BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ANTIBIOTICS; DRUGS; METABOLISM; MEASUREMENT METHODS

Bandi, M.; Viano, I.; Di Nola, F.; Leone, L.; Genazzani, E. 1983 European Journal of Clinical Microbiology 2(3):253-259

Tissue	Cases Exposure Route	Range	Mean	General Information
11552 Blood, plasma	1 Ingestion	a) 1.22-0.14 ug/mL b) 1.42-0.22 ug/mL c) 3.22-0.41 ug/mL d) 5.69-0.85 ug/mL e) 5.15-1.13 ug/mL	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 200 mg dose b) 400 mg dose c) 800 mg dose d) 1200 mg dose e) 1600 mg dose a-d) at 1 and 12 hr, e) at 2 and 12 hr. Max-min levels after single oral doses. Healthy volunteers HPLC

BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ANTIBIOTICS; DRUGS; MEASUREMENT METHODS

Paulukonis, L.T.; Musson, D.G.; Bayne, W.F. 1984 Journal of Pharmaceutical Sciences 73(1):99-102

Tissue	Cases Exposure Route	Range	Mean	General Information
11553 Urine	a) 6 b) 3 c) 3 Ingestion	a) 179.5+/-38.6-53.7+/-13.1 ug/ml b) 168.7+/-25.1-61.3+/-11.5 ug/ml c) 151.0+/-26.5-62.3+/-11.0 ug/ml	a) Not given b) Not given c) Not given	a) Healthy volunteers b) Patients with hepatic disease c) With renal disease Ranges of means for the 0-3 hr interval and the 6-24 hr interval after 400 mg dose. About 30% of dose eliminated in unmetabolized form during study. Other pharmacokinetic data presented. Slight differences between groups might become statistically significant with increased sample size. New assay method. Healthy adult volunteers, recovering hepatitis type B patients, and patients with moderate stable chronic renal insuffiency HPLC

BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ANTIBIOTICS; DRUGS; METABOLISM; MEASUREMENT METHODS

Bandi, M.; Viano, I.; Di Nola, F.; Leone, L.; Genazzani, E. 1983 European Journal of Clinical Microbiology 2(3):253-259

3-Quinolinecarboxylic acid, 1-ethyl-6-fluoro-1,4-dihydro-4-oxo-7-(1-piperazinyl)-
70458-96-7
C16-H18-F-N3-O3

Tissue	Cases Exposure Route	Range	Mean	General Information
11884 Urine	1 Ingestion	a) 265-8 ug/mL b) 271-6 ug/mL c) 389-40 ug/mL d) 1125-41 ug/mL e) 1414-70 ug/mL	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 200 mg dose b) 400 mg dose c) 800 mg dose d) 1200 mg dose e) 1600 mg dose a-d), max at 0-1 hr, min at 12-24 hr. e), max at 1-2 hr, min at 12-24 hr. Collection intervals after single oral dose. Healthy volunteers HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ANTIBIOTICS; DRUGS; MEASUREMENT METHODS Pauliukonis, L.T.; Musson, D.G.; Bayne, W.F. 1984 Journal of Pharmaceutical Sciences 73(1):99-102				

3-Quinolinecarboxylic acid, 1-ethyl-6-fluoro-1,4-dihydro-7-(4-methyl-1-piperazinyl)-4-oxo
70458-92-3
C17-H20-F-N3-O3

Tissue	Cases Exposure Route	Range	Mean	General Information
11855 Blood, plasma	15 Injection Ingestion	a) 3.54+/-0.56-10.26+/-1.22 ug/ml b) 8.21+/-1.46-20.15+/-1.26 ug/ml c) 6.8-8.2 ug/ml d) 8.5-10.0 ug/ml e) 10.17+/-0.85-21.24+/-2.24 ug/ml S.E.	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 7.5 mg/kg IV, 6 cases b) 15 mg/kg IV, 5 cases c) 7.5 mg/kg oral, 1 case, day 6 of illness d) 7.5 mg/kg oral, 1 case, day 12 of illness e) 15 mg/kg oral, 3 cases Prior to and end of dose in each. Doses every 12 hr, measured after third dose. Also receiving other antibiotics. 7-76 yr old meningitis and ventriculitis patients HPLC
BLOOD PLASMA; CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; ADULTS; ADOLESCENTS; CHILDREN; NERVOUS SYSTEM DISEASES; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY Wolf, M.; Regnier, B.; Daldoss, C.; Nham, M.; Vachon, F. 1984 Antimicrobial Agents and Chemotherapy 26(3):289-291				

Tissue	Cases Exposure Route	Range	Mean	General Information
11856 Blood, plasma	8 Injection	a) 1.2-0.26 mg/l b) 1.5-0.9 mg/l c) 2.5-1.3 mg/l d) 2.7-2.3 mg/l	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 0-24 hr, peak (2.5 mg/l) at 1.5 hr. Dose IV 200 mg b) 0-24 hr, peak (4.2 mg/ml) at 1.5 hr. Dose IV 400 mg c) 0-24 hr, peak (6.3 mg/ml) at 1.5 hr. Dose IV 600 mg d) 0-24 hr, peak (9.0 mg/ml) at 1.5 hr. Dose IV 800 mg Orally administered doses gave similar results. Volunteers, drug-free 15 d prior to study. HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; FRANCE; ADULTS; ANTIBIOTICS; DRUG THERAPY; GERMICIDES; BIOLOGICAL MONITORING Barre, J.; Houin, G.; Tillement, J.P. 1984 Journal of Pharmaceutical Sciences 73(10):1379-1382				

3-Quinolinecarboxylic acid, 1-ethyl-6-fluoro-1,4-dihydro-7-(4-methyl-1-piperazinyl)-4-oxo
70458-92-3
C17-H20-F-N3-O3

Tissue	Cases Exposure Route	Range	Mean	General Information
11867 Cerebrospinal fluid	15 Injection Ingestion	a) Not given b) Not given c) Not given d) Not given e) 2.7-6.4 ug/ml f) 6-7.5 ug/ml S.E.	a) 4.8+/-0.79 ug/ml b) 8.3+/-0.96 ug/ml c) 3.8 ug/ml d) 10.17+/-0.85 ug/ml e) Not given f) Not given S.E.	a) 2 hr after 7.5 mg/kg IV, 6 cases b) 2 hr after 15 mg/kg IV, 5 cases c) 4 hr after 7.5 mg/kg, oral 1 case d) 4 hr after 15 mg/kg, oral 3 cases e) After meningitis cured, low dose f) After meningitis cured, high dose Doses given every 12 hr, measured after 3rd doses. 7-76 yr old meningitis and ventriculitis patients HPLC
BLOOD PLASMA; CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; ADULTS; ADOLESCENTS; CHILDREN; NERVOUS SYSTEM DISEASES; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY Wolff, M.; Regnier, B.; Daldoss, C.; Nham, M.; Vachon, F. 1984 Antimicrobial Agents and Chemotherapy 26(3):289-291				

3-Thiopheneacetic acid, alpha-cyclohexyl-, 2-(hexahydro-1H-azepin-1-yl)ethyl ester
14176-16-4
C20-H31-N-O2-S
MW 349.54

Tissue	Cases Exposure Route	Range	Mean	General Information
11886 Blood, plasma	8 Injection	30-7 ng/ml	Not applicable	5 min-2 hr, peak (30 ng/ml) at 5 min, after dosage of 15 mg/kg injected over 30 min. New assay. Healthy volunteers GC
BLOOD PLASMA; DELIBERATE EXPOSURE; ALABAMA; ANEMIA; ADULTS; CARDIOVASCULAR DISEASES; ANALGESICS; ANTICOAGULANTS; VASODILATORS; DRUGS Henderson, J.D.; Manlad, V.N.; Glenn, T.M.; Cho, Y.W. 1984 Journal of Pharmaceutical Sciences 73(12):1748-1751				

3,5-Pyrazolidinedione, 1,2-diphenyl-4-(2-(phenylsulfinyl)ethyl)-
57-96-3
C25-H24-N2-O3-S
MW 464.48, MP 136-137 C (dl form)

Tissue	Cases Exposure Route	Range	Mean	General Information
11869 Blood, plasma	6 Ingestion	a) 6.05-17.04 ug/ml b) 0.21-1.07 ug/ml c) 0.10-0.48 ug/ml d) 0.61-5.92 ug/ml	a) 12.97+/-4.10 ug/ml b) Not given c) Not given d) 2.60+/-3.58 ug/ml	a) 144+/-48 min b) Sulfone metabolite 258+/-120 min c) p-Hydroxy metabolite 225+/-58 min, sulfinpyrazone d) Sulfide metabolite 653+/-487 min Peaks. Dose: 200 mg. Postabsorptive biexponential decline in levels 22-34 yr olds HPLC
ADULTS; BLOOD PLASMA; URINE; ANTICOAGULANTS; COMPARATIVE EVALUATIONS; DRUGS; DELIBERATE EXPOSURE Mahony, C.; Wolfram, K.M.; Nash, P.V.; Bjornsson, T.D. 1985 Clinical Pharmacology and Therapeutics 38(4):491-497				

3,5-Pyrazolidinedione, 1,2-diphenyl-4-(2-(phenylsulfinyl)ethyl)-
57-96-5
C26-H26-N2-O3-S
MW 494.66, MP 186-187 C (dl form)

Tissue	Cases Exposure Route	Range	Mean	General Information
11860 Blood, plasma	6 Ingestion	a) 23.8+/-3.5-0.3+/-0.2 ug/ml b) 0.2+/-0.1-2.8+/-0.7 ug/ml c) 2.4+/-0.6-0.1+/-0 ug/ml d) 18.1+/-4.5-0 ug/ml e) 11.8+/-5.7-0.1+/-0.1 ug/ml f) 3.0+/-0.8-0 ug/ml S.E.	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) Day 1, 3 hr and 24 hr after 400 mg dose (Anturano). 21.8+/-7.1 ug/ml at 1 hr b) Sulfide metabolite, at 1 and 12 hr. 1.2+/-0.4 ug/ml at 24 hr c) Sulfone metabolite, at 3 and 24 hr. 1.3+/-0.5 ug/ml at 1 hr d) Day 8, 1 and 57 hr after 200 mg dose. 200 mg dose 4X/d on d 2-7. 6.7+/-2.0 ug/ml at 0 hr e) Sulfide metabolite, at 6 and 96 hr. 9.4+/-1.8 ug/ml at 0 hr f) Sulfone metabolite, at 1 and 33 hr. 1.8+/-0.7 ug/ml at 0 hr Ranges of means. Half-life of sulfide metabolite 14.7 hr during steady-state. Healthy volunteers, mean wt 56+/-3 kg, age 27+/-2 yr (S.E.) HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; DRUGS; METABOLISM; METABOLITES Rosenkrans, B.; Fischer, C.; Jakobsen, P.; Pedersen, A.K.; Prolich, J.C. 1988 European Journal of Clinical Pharmacology 24:231-235				

Tissue	Cases Exposure Route	Range	Mean	General Information
11861 Blood, plasma	a) 11 b) 11 c) 4 d) 4 e) 4 f) 4 g) 6 h) 6 Ingestion	a) 5.9-28.5 ug/ml b) 0.33-7.46 ug/ml c) Not given d) Not given e) Not given f) Not given g) 6.2-19.4 ug/ml h) 0.05-0.157 ug/ml	a) 15.1+/-5.8 ug/ml b) 1.61+/-2.08 ug/ml c) 17.3+/-1.6 ug/ml d) 0.66+/-0.31 ug/ml e) 15.0+/-3.7 ug/ml f) 3.52+/-1.58 ug/ml g) 13.0+/-4.6 ug/ml h) 0.08+/-0.05 ug/ml	a) Controls, peaks b) Sulfide metabolite, controls, peaks c) Male control subset, peaks d) Sulfide metabolite, male control subset, peaks e) Metoclopramide (40 mg oral) treatment, male control subset, peaks f) Metoclopramide (40 mg oral) treatment, sulfide metabolite, male control subset, peaks g) Patients, peaks h) Sulfide metabolite, patients, peaks 200 mg oral. Data also given on IV vs oral route and slow release form vs regular. Healthy volunteers, 9 male, 2 female, or patients with distal section of intestine removed, 4 males, 3 females HPLC
11862 Urine	a) 11 b) 4 c) 4 d) 5 e) 6 Ingestion	a) 15.6-42.1% b) Not given c) Not given d) Not given e) 5.9-41.0%	a) 27.6%+/-10.0% b) 22.1+/-5.5% c) 32.1+/-23.6% d) 12.5+/-13.0% e) 26.6+/-15.5%	a) Controls b) Metoclopramide (40 mg oral) treatment, male control subset c) IV administration, male control subset d) Slow release form of drug, male control subset e) Patients % parent compound excreted in 48 hr. Healthy volunteers, 9 male, 2 female, or patients with distal section of intestine removed, 4 males, 3 females HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; UNITED KINGDOM; ADULTS; CARDIOVASCULAR DISEASES; ANTICOAGULANTS; BIOACCUMULATION; BIOAVAILABILITY; DRUG THERAPY; METABOLISM; METABOLITES; DRUGS Strong, R.A.; Oates, J.; Sembi, J.; Renwick, A.G.; George, C.P. 1984 Journal of Pharmacology and Experimental Therapeutics 230(3):726-732				

3,5-Pyrazolidinedione, 1,2-diphenyl-4-(2-(phenylsulfinyl)ethyl)-
57-96-5
C23-H20-N2-O3-S
MW 404.48, MP 186-187 C (dl form)

Tissue	Cases Exposure Route	Range	Mean	General Information
11868 Urine	6 Ingestion	a) 0.05-0.84% b) 40-100% % of dose	a) 0.22% b) 56+/-22% % of dose	a) Unchanged drug b) Parent drug and metabolites Dose: 200 mg 22-34 yr olds HPLC
ADULTS; BLOOD PLASMA; URINE; ANTICOAGULANTS; COMPARATIVE EVALUATIONS; DRUGS; DELIBERATE EXPOSURE Mahony, C.; Wolfram, K.M.; Nash, P.V.; Bjornson, T.D. 1983 Clinical Pharmacology and Therapeutics 33(4):491-497				

3,5-Pyrazolidinedione, 4-butyl-1-(p-hydroxyphenyl)-2-phenyl- (8 CI); 3,5-Pyrazolidinedione, 4-butyl-1-(4-hydroxyphenyl)-2-phenyl- (9 CI)
129-20-4
C19-H20-N2-O3
MW 324.37

Tissue	Cases Exposure Route	Range	Mean	General Information
11864 Blood, plasma	6 Rectal	38-8 umol/l	Not applicable	1-240 hrs, peak (70 umol/l) at approximately 10 hr after 250 mg suppository. Data from graph. New assay. HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; FRANCE; ANTIPYRETICS; ANALGESICS; DRUG THERAPY; DRUGS; MEASUREMENT METHODS; BIOACCUMULATION; METABOLITES Sicsdi, A.; Colucci, D.; Mangoni, P. 1983 Journal of Chromatography 275:201-206				

3,5-Pyrazolidinedione, 4-butyl-1,2-diphenyl-
50-33-9
C19-H20-N2-O2
MW 308.37, MP 106 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11865 Blood, plasma	12 Sublingual Dermal	a) 1.24-0 ng/ml b) 1.32+/-0.96-0.15+/-0.04 ng/ml c) 0.29+/-0.069-0.12+/-0.047 ng/ml	a) Not given b) About 0.8 ng/ml c) About 0.2 ng/ml	a) 5 and 20 min after 400 ug test dose given sublingually. 0.09 ng/ml at 2.5 min b) 2 and 16 hr after first of 3 doses of nitrol ointment (given at 0, 8, and 16 hr). 1.12+/-0.77 ng/ml at 1 hr. Drug delivery about 36 mg/d c) 4 and 24 hr after 2 transderm-nitro 5 patches, left in place 24 hr. 0.30+/-0.057 ng/ml at 1 hr. Drug delivery about 10 mg/d. Ranges of means. b) and c) crossover study. 21-35 yr old volunteers LC
BLOOD PLASMA; DELIBERATE EXPOSURE; DRUGS; COMPARATIVE EVALUATIONS Curry, S.H.; Kwon, H.-R.; Perrin, J.H.; Culp, J.R.; Pepine, C.J.; Yu, W. 1984 Lancet 1(8380):1207				

3,5-Pyridinedicarboxylic acid, 1,4-dihydro-2,6-dimethyl-4-(o-nitrophenyl)-, dimethyl ester (8 CI); 3,5-Pyridinedicarboxylic acid, 1,4-dihydro-2,6-dimethyl-4-(2-nitrophenyl)-, dimethyl ester (9 CI)
21829-38-4
C17-H18-N2-O6
MW 346.34, MP 172-174 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11866 Blood, plasma	1 Ingestion	10-60 ng/ml	Not given	Seven measurements over 3 mo, peak 3 mo, dose increasing from 20-60 mg/d. 53 yr old woman with moderately severe hypertension, Scotland Highly significant ($p<0.01$) relationship, on individual basis, between mean arterial pressure and concentration. GLC
BLOOD PLASMA; DELIBERATE EXPOSURE; SCOTLAND; CASE HISTORIES; CARDIOVASCULAR DISEASES; HYPERTENSION; ANTIHYPERTENSIVE AGENTS; VASODILATORS; BLOOD PRESSURE; DRUGS Pannaid, P.; Reid, J.L. 1983 European Journal of Clinical Pharmacology 25:143-144				

Tissue	Cases Exposure Route	Range	Mean	General Information
11867 Blood, plasma	1 Ingestion	127-10.4 ug/l	Not applicable	260 mg dose, suicide attempt. Determined at 9 hr, 12 hr (87.1 ug), and 45 hr after ingestion. No drug detected in 24 hr urine. 28 yr old with advanced renal insufficiency and hypertension Headaches, facial flushing, weakness, vertigo, muscle cramps Serious drop in blood pressure (80/20 mm Hg) GC
BLOOD PLASMA; DELIBERATE EXPOSURE; GERMANY; ADULTS; SUICIDE; KIDNEY DISEASES; HYPERTENSION; ANEMIA; VASODILATORS; DRUG ABUSE; DRUG THERAPY; BIOACCUMULATION; BLOOD PRESSURE; DRUGS Schiff, H.; Stupa, J.; Schollmeyer, P. 1984 Clinical Toxicology 22(4):387-395				

Tissue	Cases Exposure Route	Range	Mean	General Information
11868 Blood, plasma	6 Injection Ingestion	a) 55-1.5 ng/ml b) 115-3.8 ng/ml c) 23.5-4 ng/ml d) 100-145+/-15 ng/ml e) 17.4-46.0+/-10.1 ng/ml	a) Not given b) Not given c) Not given d) Not given e) Not given	a) At 0.25 and 5 hr, after IV 0.015 mg/kg dose b) At 1 and 8 hr, after 2X10 mg capsules c) At 4-7 and 32 hr, after 20 mg tablet d) Maximum levels, at 0.7-2.0 hr, after 2 X 10 mg capsules e) Maximum levels, at 2.0-5.0 hr, after 20 mg tablet a), b) and c) 1 case, estimated from graph, effect on heart rate, diastolic blood pressure, and plasma norepinephrine discussed and graphed. Healthy adults, 23-28 yr, 68.0-79.4 kg, nonsmokers, no other drugs, alcohol, or caffeine HPLC
DRUGS; BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; METABOLISM Kleinbloesem, C.H.; van Brummelen, P.; van de Linde, J.A.; Voogd, P.J.; Breimer, D.D. 1984 Journal of Clinical Pharmacology and Therapeutics 35(6):743-749				

3,5-Pyridinedicarboxylic acid, 1,4-dihydro-2,6-dimethyl-4-(o-nitrophenyl)-, dimethyl ester (8 CI); 3,5-Pyridinedicarboxylic acid, 1,4-dihydro-2,6-dimethyl-4-(2-nitrophenyl)-, dimethyl ester (9 CI)
21829-26-6
C17-H18-N2-O6
MW 346.34, MP 172-174 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11868 Blood, plasma	1 Injection	48-2.2 ng/ml	Not applicable	10 min and 6 hr after start of 30 min infusion of 4.5 mg. Estimated from graph. New method. 46 yr old volunteer HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; MEASUREMENT METHODS; DRUGS Kleinbloesem, C.H.; Van Harten, J.; Van Brummelen, P.; Breimer, D.D. 1984 Journal of Chromatography 306:209-216				

Tissue	Cases Exposure Route	Range	Mean	General Information
11870 Blood, plasma	6 Rectal	a) 4.4-21 ng/ml b) 19-28 ng/ml c) 20-4 ng/ml d) 14-27 ng/ml	a) Not given b) Not given c) Not given d) 21+/-5 ng/ml	a) 1-6 hr after start of infusion, 1 subject b) Steady state plateau, 6-24 hr, same subject c) 0-4 hr after end of infusion, same subject d) Steady state, 6 subjects Drug delivered with osmotic pump, 1.5+/-0.2 mg/hr. Healthy adults, 21-29 yr, 68-78 kg, nonsmokers Decreased blood pressure in normotensive subjects HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; ANTIHYPERTENSIVE AGENTS; BIOLOGICAL MONITORING Kleinbloesem, C.H.; van Harten, J.; de Leede L.G.J.; van Brummelen, P.; Breimer, D.D. 1984 Clinical Pharmacology and Therapeutics 36(3):396-401				

Tissue	Cases Exposure Route	Range	Mean	General Information
11871 Blood, plasma	12 Injection Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 25.97+/-4.81 ng/ml b) 26.41+/-3.72 ug/ml.hr c) 75.46+/-17.46 ng/ml d) 125.03+/-17.82 ug/ml.hr	a) Peak 0.06+/-0.03 hr after 1 mg IV b) Area under curve (AUC) 8 hr after 1 mg IV c) Peak 0.57+/-0.06 hr after 10 mg oral d) AUC 8 hr after 10 mg oral. Healthy volunteers, 21-28 yr old, mean wt 75.3 kg Mild to moderate flushing, headache GC-EC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; CARDIOVASCULAR DISEASES; DRUGS; DRUG THERAPY; VASODILATORS; ANALGESICS; BIOACCUMULATION Foster, T.S.; Hamann, S.R.; Richards, V.R.; Bryant, P.J.; Graves, D.A.; McAllister, R.G. 1983 Journal of Clinical Pharmacology 23:161-170				

3,5-Pyridinedicarboxylic acid, 1,4-dihydro-2,6-dimethyl-4-(o-nitrophenyl)-, dimethyl ester (8 CI); 3,5-Pyridinedicarboxylic acid, 1,4-dihydro-2,6-dimethyl-4-(2-nitrophenyl)-, dimethyl ester (9 CI)
21829-28-4
C17-H18-N2-O6
MW 346.34, MP 172-174 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11873 Urine	6 Injection Ingestion	a) 42.1-78.2+/-12.6% of dose b) 58.1-68.8+/-12.8% of dose c) 19.0-42.0+/-7.9% of dose	a) 57.7+/-12.6% of dose b) 64.0+/-12.8% of dose c) 32.8+/-7.9% of dose	a) At 24 hr, 0.015 mg/kg IV dose b) At 24 or 32 hr, 2 X 10-mg capsules, single oral dose c) At 32 hr, 20 mg tablet, single oral dose Measured as major metabolite Effect on heart rate, diastolic blood pressure, and plasma norepinephrine discussed and graphed. Healthy adults, 22-28 yr, 62.9-79.4 kg, nonsmokers, no other drugs, alcohol, or caffeine HPLC

DRUGS; BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; METABOLISM
Kleinbloesem, C.H.; van Brummelen, P.; van de Linde, J.A.; Voogd, P.J.; Breimer, D.D. 1984 Journal of Clinical Pharmacology and Therapeutics 35(6):742-749

3H-Pyrazol-3-one- 2,4-dihydro-5-methyl-2-(2-(2-naphthalenyloxy(ethyl)-
80040-30-1
C16-H16-N2-O2

Tissue	Cases Exposure Route	Range	Mean	General Information
11878 Blood, plasma	1 Ingestion	a) 58-3000 ng/ml b) 58-3100 ng/ml	a) Not given b) Not given	a) High-performance liquid chromatography, time course >0-50 hr b) High-performance thin-layer chromatography, >0-25 hr Estimated from graph. Repeated doses of 4000 mg/sq m/12 hr. Clinical trial, new antitumor, antimetastatic drug. Cancer patient, Wayne State University, Detroit, MI HPLC; HPTLC

BLOOD PLASMA; MEASUREMENT METHODS; DRUGS; DRUG THERAPY; ANTITUMOR AGENTS; DELIBERATE EXPOSURE; MICHIGAN; CARCINOMAS; NEOPLASMS; COMPARATIVE EVALUATIONS; CHEMOTHERAPY
Evans, L.J., Jr.; Young, J.D.; Hutchison, J.S.; Baker, L.H. 1984 Journal of Chromatography 306:168-170

3H-1,4-Benzodiazepin-2-amine, 7-chloro-N-methyl-5-phenyl-, 4-oxide, monohydrochloride, mixt. with 3-(10,11-dihydro-5H-dibenzo(a,d)cycloheptan-5-ylidene)-N,N-dimethyl-1-propanamin e hydrochloride (9 CI)

58967-28-2

C20-H23-N.C16-H14-Cl-N3-O.2Cl-H

Tissue	Cases Exposure Route	Range	Mean	General Information
11874 Blood, plasma	10 Injection	a) 10-72 ng/ml b) 22-64 ng/ml c) 82-100 ng/ml d) 208-1068 ng/ml e) 548-763 ng/ml f) 280-680 ng/ml g) 68-457 ng/ml	a) 36 ng/ml b) 51 ng/ml c) 86 ng/ml d) 667 ng/ml e) 615 ng/ml f) 491 ng/ml g) 254 ng/ml	a) Amitriptyline b) Nortriptyline c) 10-Hydroxynortryptiline d) Chlordiazepoxide e) Desmethylchlordiazepoxide f) Demoxepam g) Desmethyldiazepam Steady-state levels 13 hrs after last dose of 2 wk regimen. Drug is combination of amitriptyline and chlordiazepoxide, mean daily dose was 27 mg and 67 mg respectively. Patients with primary depression, 7 females, 3 males HPLC

BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DEPRESSION; ANTIDEPRESSIVE AGENTS; DRUG INTERACTION; DRUG THERAPY; DRUGS; BIOACCUMULATION; METABOLITES

Dixon, R.; Cohen, J. 1983 Journal of Clinical Psychopharmacy 3(2):107-109

3H-1,4-Benzodiazepine, 7-chloro-2-(methylamino)-5-phenyl-, 4-oxide (8 CI); 3H-1,4-Benzodiazepin-2-amine, 7-chloro-N-methyl-5-phenyl-, 4-oxide (9 CI)

58-25-3

C16-H14-Cl-N3-O

MW 299.75, MP 236-236.5 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11875 Blood	a) 1 b) 24 c) 5	a) Not applicable b) 0.2-39 mg/l c) 1.7-48 mg/l	a) 7 mg/l b) 8.8 mg/l c) 21.7+/-22.8 mg/l	a) From single-drug death, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths, 1979-1980. Autopsy, Maryland State Medical Examiners office. Death

BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS

Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:226-230

3H-1,4-Benzodiazepine, 7-chloro-2-(methylamino)-5-phenyl-, 4-oxide (8 CI); 3H-1,4-Benzodiazepin-2-amine, 7-chloro-N-methyl-5-phenyl-, 4-oxide (9 CI)
58-25-3
C16-H14-Cl-N3-O
MW 299.76, MP 206-206.5 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11876 Blood, whole	a) 25 b) 26 Ingestion	a) 2-15 mg/L b) 2-26 mg/L	a) Not given b) Not given	a) Overdose on drug alone b) Overdose on drug and ethanol In b), ethanol levels 40-400 mg/dL. Emergency unit cases, San Diego, 10/74-10/84. Most were chronic alcoholics. Age 17-62. Tachycardia, lethargy, dysarthria, nystagmus, seizures, hyper- or hyporeflexia, hyper- or hypotension, ataxia, hallucinations, hyperthermia, mydriasis UV
BLOOD; CALIFORNIA; DELIBERATE EXPOSURE; ADULTS; ADOLESCENTS; NEUROLOGIC MANIFESTATIONS; DRUGS; ALCOHOLS; DRUG INTERACTION; DRUG ABUSE Bailey, D.N. 1986 Clinical Toxicology 22(5):433-446				

4(1H)-Pyrimidinone, 5-(1,3-benzodioxol-5-ylmethyl)-2-((2-(((5-methyl-1H-imidazol-4-yl)methyl)thio)ethyl)amino)-
72830-09-6
C19-H21-N5-O3-S
MW 399.51

Tissue	Cases Exposure Route	Range	Mean	General Information
11877 Urine	6 Ingestion Injection	a) Not given b) Not given	a) 46.6+/-5.5 % b) 24.2+/-4.7 % % of dose	a) Total for 4 d. 1.4 mg/kg target dose, IV b) Total for 4 d. 5.5 mg/kg target dose, oral C-14 labeled cimetidine dihydrochloride Healthy volunteers Scintillation counting
URINE; DELIBERATE EXPOSURE; ADULTS; DRUGS Cox, P.J.; Reijbroek, W.M.H.; Taylor, D.C.; Wood, P.J.; Cresswell, P.R.; Pepper, E.S.; Moore, P.J.; Mitchell, R.C.; Blake, T.J.A.; Dawborne, J.S.; Metcalf, R.; Johnson, P. 1984 Xenobiotica 14(7):609-614				

4(3H)-Quinazolinone, 2-methyl-3-o-tolyl- (8 CI); 4(3H)-Quinazolinone, 2-methyl-3-(3-methylphenyl)- (9 CI)
72-44-6
C16-H14-N2-O
MW 250.30, MP 120 C, also given as 114-116 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11878 Blood	16	0.66-4.02 mg/L	1.59+/-1.20 mg/L	Drivers involved in single-car accidents who were killed in crash or lived less than 1 hr and received no vigorous medical treatment, with blood ethanol levels >0.1 mg/L. Blood ethanol >0.8 g/L in 13 of these. Additional data in article. 24.7+/-9.2 yr old males, vehicle fatalities, 1978-1981, NC RIA
BLOOD; NORTH CAROLINA; AUTOPSIES; DRUGS; DRUG ABUSE; DRUG INTERACTION; PSYCHOTROPIC DRUGS; SEDATIVES; HYPNOTICS; ANTICONVULSANTS; FORENSIC MEDICINE; ALCOHOLS; DELIBERATE EXPOSURE Mason, A.P.; McBay, A.J. 1984 Journal of Forensic Sciences 29(4):967-1034				

4(3H)-Quinazolinone, 2-methyl-3-o-tolyl- (8 CI); 4(3H)-Quinazolinone, 2-methyl-3-(2-methylphenyl)- (9 CI)
72-44-6
C16-H14-N2-O
MW 250.29, MP 120 C, also given as 114-116 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11879 Blood	a) 8 b 85 c) 7	a) 11-42 mg/l b) 0.2-22 mg/l c) 8.8-18 mg/l	a) 21 mg/l b) 8.9 mg/l c) 9.8+/-6.4 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug deaths, 1975-1980 c) Multiple-drug related deaths, 1979-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooke, C.R. 1985 Journal of Analytical Toxicology 7:226-230				

Tissue	Cases Exposure Route	Range	Mean	General Information
11880 Blood, plasma	8 Ingestion	a) Not given b) Not given c) Not given	a) 0.58 ug/ml b) 2.06+/-0.88 ug/ml c) 2.82+/-0.80 ug/ml	a) 1 hr, 1 case b) 2 hr, 8 cases c) 8 hr, 8 cases After 250 mg as hydrochloride. Healthy volunteers, 21-30 yr old, 11 males, 3 females. GC
11881 Saliva	8 Ingestion	a) Not given b) Not given c) Not given	a) 0.07 ug/ml b) 0.32+/-0.09 ug/ml c) 0.30+/-0.06 ug/ml	a) 1 hr, 1 case b) 2 hr, 8 cases c) 8 hr, 8 cases After 250 mg as hydrochloride. Healthy volunteers, 21-30 yr old, 11 males, 3 females. GC
SALIVA; BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; CANADA; DRUGS; SEDATIVES; BENZODIAZEPINES; ANTIHISTAMINES; NARCOTICS; ANALGESICS; FORENSIC MEDICINE; DIAZEPAMS; BIOACCUMULATION Sharp, M.E.; Wallace S.M.; Hindmarsh, K.W.; Peel, H.W. 1985 Journal of Analytical Toxicology 7:11-14				

4-Biphenylacetic acid, 2-fluoro-alpha-methyl- (8 CI); (1,1'-Biphenyl)-4-acetic acid, 2-fluoro-alpha-methyl- (9 CI)
5104-49-4
C15-H13-F-O2
MW 244.27, MP 110-111 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11882 Blood, serum	a) 1 b) 1 Ingestion	a) 0.7-0.5 ug/ml b) 4.5-0.5 ug/ml	a) Not applicable b) Not applicable	a) 30 min-16 hr, peak (8 ug/ml) at 4 hr after 50 mg oral dose b) 30 min-16 hr, peak (10 ug/ml) at 2 hr after 50 mg dose New assay. Healthy volunteers HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; ANALGESICS; BIOACCUMULATION; RHEUMATOID ARTHRITIS; DRUGS Albert, K.S.; Gillespie, W.R.; Raabe, A.; Garry, M. 1984 Journal of Pharmaceutical Sciences 73(12):1823-1825				

4-Morpholinecarboxamide, N-(2-((2-hydroxy-3-(4-hydroxyphenoxy)propyl)amino)ethyl)-, (+-)-
81801-12-9
C16-H25-N3-O5

Tissue	Cases Exposure Route	Range	Mean	General Information
11868 Blood, plasma	a) 1 b) 1 Injection	a) 800-5.5 ng/ml b) 700-10 ng/ml	a) Not given b) Not given	a) 5 min and 6 hr after 5.6 mg b) 5 min and 6 hr after 7.0 mg Both doses 100 ug/kg. Estimated from graph. New method. Healthy volunteers HPLC

URINE; BLOOD PLASMA; DELIBERATE EXPOSURE; HEART DISEASES; DRUGS; MEASUREMENT METHODS
Oddie, C.J.; Jackman, G.P.; Bobik, A. 1984 Journal of Chromatography 306:870-875

Tissue	Cases Exposure Route	Range	Mean	General Information
11884 Blood, plasma	a) 6 b) 6 c) 6 d) 6 Injection	a) Not given b) Not given c) Not given d) Not given	a) 111+/-22 ng/ml b) 1036+/-304 ng/ml c) 191+/-17 ng/ml d) 1879+/-66 ng/ml	a) Control, 2.1+/-0.3 mg IV b) Control, 10.2+/-0.6 mg IV c) With autonomic blockade (1 mg prazosin), 2.1+/-0.3 mg IV d) With autonomic blockade (1 mg prazosin), 10.2+/-0.6 mg IV Steady state levels. With autonomic blockade, there was 200-800% increase in hr rise with each dose. 6 males, 3 females, healthy volunteers HPLC

BLOOD PLASMA; DELIBERATE EXPOSURE; AUSTRALIA; ADULTS; HYPERTENSION; CARDIOVASCULAR DISEASES; BETA BLOCKER; DRUG THERAPY; BIOACCUMULATION; BLOOD PRESSURE; DRUGS
Jennings, G.; Bobik, A.; Oddie, C.; Restall, R. 1984 Clinical Pharmacology and Therapeutics 35(5):604-608

Tissue	Cases Exposure Route	Range	Mean	General Information
11886 Blood, plasma	6 Ingestion Injection	a) 0.3-0.03 ug equiv/ml b) 0.079-0.026 ug/ml c) 0.3-0.026 ug equiv/ml d) 0.38-0.031 ug/ml	a) Not given b) Not given c) Not given d) Not given	a) Drug plus metabolites, 2-12 hr after 2.5 mg/oral b) Drug only, 2-24 hr after 2.5 mg/kg oral c) Drug plus metabolites, 0-24 hr after 0.1 mg/kg IV d) Drug only, 0-24 hr after 0.1 mg/kg IV Bioavailability was 4.8%. 6% absorption after oral dose. Ranges of means. Healthy volunteers Scintillation counting; RIA

BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; DRUGS; STIMULANTS; COMPARATIVE EVALUATIONS; MEASUREMENT METHODS; METABOLISM; BIOAVAILABILITY; METABOLITES
Marten, T.R.; Bourne, G.R.; Miles, G.S.; Shuker, B.; Rankine, H.D.; Dutka, V.N. 1984 Drug Metabolism and Disposition 12(5):652-660

4-Morpholinecarboxamide, N-(2-((2-hydroxy-3-(4-hydroxyphenoxy)propyl)amino)ethyl)-, (+-)-
81801-13-0
C16-H25-N3-O5

Tissue	Cases Exposure Route	Range	Mean	General Information
11866 Urine	a) 1 b) 1 Injection	a) Not given b) Not given	a) 4.6 mg b) 5.7 mg	a) Total for 24 hr after 5.6 mg b) Total for 24 hr after 7.0 mg Both doses 100 ug/kg. Estimated from graph. New method. Healthy volunteers HPLC
URINE; BLOOD PLASMA; DELIBERATE EXPOSURE; HEART DISEASES; DRUGS; MEASUREMENT METHODS Oddie, C.J.; Jackman, G.P.; Bobik, A. 1984 Journal of Chromatography 306:370-375				

Tissue	Cases Exposure Route	Range	Mean	General Information
11867 Urine	6 Ingestion Injection	a) Not given b) Not given	a) 98.7+/-1.4% b) 8.3+/-4.4%	a) 0-5 d total, 0.1 mg/kg IV b) 0-5 d total, 2.5 mg/kg oral >85% of material excreted appeared within 24 hr of dose. Healthy volunteers Scintillation counting; TLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; DRUGS; STIMULANTS; COMPARATIVE EVALUATIONS; MEASUREMENT METHODS; METABOLISM; BIOAVAILABILITY; METABOLITES Marten, T.R.; Bourne, G.R.; Miles, G.S.; Shuker, B.; Rankine, H.D.; Dutka, V.N. 1984 Drug Metabolism and Disposition 12(5):652-660				

4-Oxa-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 3-(2-hydroxyethylidene)-7-oxo-, (2R-(2alpha,3Z,5alpha))-
66001-44-8
C8-H9-N-O4
MW 199.16

Tissue	Cases Exposure Route	Range	Mean	General Information
11868 Blister fluid	6 Injection	3.4+/-2.4-0.3+/-0.1 ug/ml	Not applicable	0.5-7 hr, peak (3.4+/-2.4 ug/ml) at 0.5 hr after 0.3 g plus 3 g ticarcillin in 20 ml water. Healthy volunteers, 24-40 yr old, mean wt 78.7+/-8.1 kg, ht 1.78+/-0.07 Well diffusion assay
BLOOD SERUM; BLISTER FLUID; DELIBERATE EXPOSURE; ADULTS; UNITED KINGDOM; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; URINE Bennett, S.; Wise, R.; Weston, D.; Dent, J. 1983 Antimicrobial Agents and Chemotherapy 23(6):831-834				

Tissue	Cases Exposure Route	Range	Mean	General Information
11869 Blood, serum	8 Ingestion	2.1-0.06 ug/ml	Not given	At 1 and 6 hr. 0.4 mg/ml at 20 min. 125 mg dose. Estimated from graph. Range of means Healthy volunteers, 26-34 yr, 136-195 lbs HPLC
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ADULTS; DRUGS Fernlew, K.E.; Daigneault, E.A.; Aten, E.M.; Roseman, J.M. 1984 Journal of Clinical Pharmacology 24:452-456				

4-Oxa-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 3-(2-hydroxyethylidene)-7-oxo-, (2R-(2alpha,3Z,5alpha))-
59001-44-6
C8-H9-N-O5
MW 199.16

Tissue	Cases Exposure Route	Range	Mean	General Information
11900 Blood, serum	6 Injection	11.4+/-3.4-0.1+/-0.1 ug/ml	Not applicable	15 min-6 hr, peak (11.4+/-3.4 ug/ml) immediately after 0.2 g plus 3 g ticarcillin in 20 ml water. Healthy volunteers, 26-40 yr old, mean wt 78.7+/-8.1 kg, ht 1.78+/-0.07 Well diffusion assay
BLOOD SERUM; BLISTER FLUID; DELIBERATE EXPOSURE; ADULTS; UNITED KINGDOM; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; URINE Bennett, S.; Wise, R.; Weston, D.; Dent, J. 1983 Antimicrobial Agents and Chemotherapy 23(6):831-834				

Tissue	Cases Exposure Route	Range	Mean	General Information
11891 Urine	6 Ingestion	18-26 % of dose	Not given	At 2 and 6 hr. 24% at 4 hr. 135 mg dose. Estimated from graph. Range of means Healthy volunteers, 26-34 yr, 136-198 lbs HPLC
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ADULTS; DRUGS Perelow, K.E.; Daigneault, E.A.; Aten, E.M.; Roseman, J.M. 1984 Journal of Clinical Pharmacology 24:452-456				

Tissue	Cases Exposure Route	Range	Mean	General Information
11903 Urine	6 Injection	Not given	44.0+/-17.7%	% recovery in 24 hr after 0.2 g plus 3 g ticarcillin in 20 ml water. Healthy volunteers, 26-40 yr old, mean wt 78.7+/-8.1 kg, ht 1.78+/-0.07 Well diffusion assay
BLOOD SERUM; BLISTER FLUID; DELIBERATE EXPOSURE; ADULTS; UNITED KINGDOM; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; URINE Bennett, S.; Wise, R.; Weston, D.; Dent, J. 1983 Antimicrobial Agents and Chemotherapy 23(6):831-834				

4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 3,3-dimethyl-6-(((((2-(methylsulfonyl)-2-oxo-1-imidazolidinyl)carbonyl)amino)phenylacetyl)amino)-7-oxo-, (2S-(2alpha,5alpha,6beta(S*)))-
51481-65-3
C21-H26-N6-O8-S2
MW 550.60

Tissue	Cases Exposure Route	Range	Mean	General Information
11866 Bile	8 Injection	a) Not given b) Not given c) Not given	a) 110 ug/ml b) 58 ug/ml c) 18 ug/ml	a) Steady-state, infusion rate 22.7+/-1.4 mg/min b) Steady-state, infusion rate 11.4+/-0.7 mg/min c) Steady-state, infusion rate 5.6+/-0.4 mg/min Calculated from graph and table. Healthy volunteers HPLC
11864 Blood, plasma	8 Injection	a) Not given b) Not given c) Not given	a) 66.4+/-15.9 ug/ml b) 40.3+/-7.5 ug/ml c) 18.4+/-4.6 ug/ml	a) Steady-state, infusion rate 22.7+/-1.4 mg/min b) Steady-state, infusion rate 11.4+/-0.7 mg/min c) Steady-state, infusion rate 5.7+/-0.4 mg/min. Healthy volunteers HPLC
BLOOD PLASMA; URINE; BILE; DELIBERATE EXPOSURE; GERMANY; ADULTS; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION Gundert-Remy, U.; Hildebrandt, R.; Stiehl, A.; Weber, E. 1983 Clinical Pharmacology and Therapeutics 33(5):656-661				

Tissue	Cases Exposure Route	Range	Mean	General Information
11866 Blood, plasma	47 Injection	a) 252+/-80-72+/-28 ug/ml b) 272+/-40-34+/-11 ug/ml c) 189+/-44-9+/-6 ug/ml d) 159+/-27-29+/-28 ug/ml e) 152+/-27-16+/-14 ug/ml f) 121+/-20-8+/-7 ug/ml	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 0 and 8 hr after 75 mg/kg IV, <36 wk gestation and 4-7 d old, 26 cases b) >/-36 wk gestation and <1-7 d old, 13 cases c) >/-36 wk gestation and >7 d old, 8 cases d) 0.5 and 8 hr after 75 mg/kg IM, <36 wk gestation and <1-7 d old, 4 cases e) >/-36 wk gestation and </-7 d old, 5 cases f) >/-36 wk gestation and >7 d old, 2 cases. Newborn infants with suspected sepsis, Parkland Memorial Hospital and Children's Medical Center, Dallas Agar diffusion
BLOOD PLASMA; DELIBERATE EXPOSURE; TEXAS; NEWBORN; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY Odio, C.; Threlkeld, N.; Thomas, M.L.; McCracken, G.H., Jr. 1984 Antimicrobial Agents and Chemotherapy 25(5):556-559				

Tissue	Cases Exposure Route	Range	Mean	General Information
11866 Blood, serum	31 Injection	245+/-90.4-20.4+/-27.5 mg/l	88.7+/-40.4 mg/l	Range of means over dosage interval. 30 min infusion of 12.2-125 mg/kg/4 hr Levels not dose-dependent. Pharmacokinetic data also presented. 2-19 yr old children with malignancies and bacterial infections Bioassay
BLOOD SERUM; DELIBERATE EXPOSURE; ADOLESCENTS; CHILDREN; NEOPLASMS; OSTEOSARCOMAS; SARCOMAS; LEUKEMIA; ANTIBIOTICS; DRUGS Kramer, W.G.; Pickering, L.K.; Culbert, S.; Frankel, L.S. 1984 Antimicrobial Agents and Chemotherapy 25(1):62-64				

4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 3,3-dimethyl-6-(((((2-(methylsulfonyl)-2-oxo-1-imidazolidinyl)carbonyl)amino)phenylacetyl)amino)-7-oxo-, (2S-(2alpha,5alpha,6beta(S*)))-
51481-65-3
C21-H25-N5-O8-S2
MW 539.58

Tissue	Cases Exporure Route	Range	Mean	General Information
11897 Blood, serum	6 Injection	40-120 ug/ml	81.6+/-30.5 ug/ml	4 g IV/6 hr for 5 d Study to determine effect on hemostasis. No template bleeding times >15 min resulted, so potential for, bleeding may be less than in patients treated with other antipseudomonal penicillins Healthy 22-35 yr old volunteers Bioassay

BLOOD SERUM; DELIBERATE EXPOSURE; DISEASES; ANTIBIOTICS; ANTICOAGULANTS; DRUGS

Ballard, J.O.; Barnes, S.G.; Sattler, F.R. 1984 Antimicrobial Agents and Chemotherapy 25(2):153-156

Tissue	Cases Exposure Route	Range	Mean	General Information
11896 Blood, serum	58 Injection	a) 281+/-63-43+/-13 ug/ml b) 133+/-22-34+/-16 ug/ml c) 204+/-99-70+/-19 ug/ml d) 284+/-106-84+/-28 ug/ml e) 185+/-136-41+/-15 ug/ml f) 167+/-80-43+/-10 ug/ml g) 150+/-33-45+/-14 ug/ml h) 134+/-17-48+/-14 ug/ml	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) Extrapolated peak and 8 hr after single 75 mg/kg IV dose. 9 cases b) 2 & 8 hr after single 75 mg/kg IM dose. 44 cases c) Peak & trough, d 1, group I d) Peak & trough, d 5, group I e) Peak & trough, d 7-10, group I f) Peak & trough, d 1, group II g) Peak & trough, d 5, group II h) Peak & trough, d 7-10, group II Group I: mean wt 1.2+/-0.2 kg, mean gestational age 29+/-2 wk. Dose: 75 mg/kg 3Xd, IV. 16 cases. Group II: mean wt 2.6+/-0.5 kg, mean gestational age 37+/-2 wk. Dose: 75 mg/kg, 4X/d, IV. Peak, 1.5 hr after start of dose. Trough, prior to next dose. Significant differences, trough c) & e) and d) & e) ($p<0.001$). New born infants (72% </=36 wk gestation) with sepsis

BLOOD SERUM; DELIBERATE EXPOSURE; NEWBORN; PREMATURE INFANTS; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY

Jusiche, D.M.; Rubio, T.T.; Wirth, F.H., Jr.; Karetkin, E.H.; Jusko, W.J. 1984 Journal of Pediatrics 104(5):778-781

Tissue	Cases Exposure Route	Range	Mean	General Information
11880 Blood, serum	12 Injection	a) Not given b) Not given c) Not given d) Not given	a) 162+/-73 mg/l b) 192.9+/-56 mg/l c) Not detected d) 6.3+/-2.4 mg/l	a) 6 controls, 5 min after 30 min IV b) 4 liver diseased 5 min after 30 min IV c) 6 controls, 8 hr after 30 min IV d) 4 liver diseased, 8 hr after 30 min IV Dose, 3 mg Patients with hepatic insufficiency, normal renal function. Controls. Microbiological

LIVER DISEASES; BLOOD SERUM; URINE; ANTIBIOTICS; DRUGS

Bunke, C.M.; Arcnoff, G.R.; Brier, M.E.; Sloan, R.S.; Luft, F.C. 1983 Clinical Pharmacology and Therapeutics 33(1):73-76

4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 3,3-dimethyl-6-(((((3-(methylsulfonyl)-2-oxo-1-imidazolidinyl)carbonyl)amino)phenylacetyl)amino)-7-oxo-, (2S-(2alpha,5alpha,6beta(S*)))-
51481-65-3
C21-H25-N5-O8-S2
MW 539.63

Tissue	Cases Exposure Route	Range	Mean	General Information
11400 Urine	6 Injection	a) Not given b) Not given c) Not given	a) 70 ug/ml b) 37 ug/ml c) 18 ug/ml	a) Steady-state, infusion rate 22.7+/-1.4 mg/min b) Steady-state, infusion rate 11.4+/-0.7 mg/min c) Steady-state, infusion rate 5.7+/-0.4 mg/min Calculated from graph and table. Healthy volunteers HPLC
BLOOD PLASMA; URINE; BILE; DELIBERATE EXPOSURE; GERMANY; ADULTS; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION Gundert-Remy, U.; Hildebrandt, R.; Stiehl, A.; Weber, E. 1983 Clinical Pharmacology and Therapeutics 33(5):656-661				

Tissue	Cases Exposure Route	Range	Mean	General Information
11401 Urine	a) 8 b) 4 Injection	a) Not given b) Not given	a) 35.5+/-11.6% of dose b) 66.3+/-22.6% of dose	a) Controls b) Liver diseased 24 hr after 3 gm IV. Patients with hepatic insufficiency, normal renal function. Controls. Microbiological
LIVER DISEASES; BLOOD SERUM; URINE; ANTIBIOTICS; DRUGS Bunke, C.M.; Aronoff, G.R.; Brier, M.E.; Sloan, R.S.; Luft, F.C. 1985 Clinical Pharmacology and Therapeutics 38(1):73-76				

4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 3,3-dimethyl-7-oxo-, 4,4-dioxide, (2S-cis)-
68373-14-8
C8-H11-N-O5-S

Tissue	Cases Exposure Route	Range	Mean	General Information
11402 Blood, serum	a) 4 b) 4 c) 4 d) 4 e) 3 f) 3 Injection	a) 20-0.9 ug/ml b) 43-1.9 ug/ml c) 4.8-0.6 ug/ml d) 8-1.5 ug/ml e) 22-0.4 ug/ml f) 1.2-2 ug/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) 0-4 hrs, peak (20 ug/ml) immediately after 500 mg IV b) 0-4 hrs, peak (43 ug/ml) immediately after 100 mg IV c) 0-6 hrs, peak (12 ug/ml) at 0.5 hr after 500 mg IM d) 0-6 hrs, peak (30 ug/ml) at 0.5 hr after 100 mg IM e) 0-4 hrs, peak (22 ug/ml) immediately after last administration of 500 mg q.i.d. IV for 3 d f) 0-4 hrs, peak (10 ug/ml) 1 hr after last administration of 500 mg q.i.d. IM for 3 d Data for co-administration of penicillin, ampicillin, and cefoperazone also given. Healthy volunteers Well diffusion assay

(next page)

4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 3,3-dimethyl-7-oxo-, 4,4-dioxide, (2S-cis)-
68373-14-8
C8-H11-N-O5-S

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
11403 Urine	4 Injection	72.5-78.6%	75.5+/-5.5%	% dose recovered in 6 hrs. Healthy volunteers GC; MS
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ADULTS; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; COMPARATIVE EVALUATIONS				
Foulds, G.; Stankewich, J.P.; Marshall, D.C.; O'Brien, M.M.; Hayes, S.L.; Weidler, D.J.; McMahon, F.G. 1983 Antimicrobial Agents and Chemotherapy 23(5):692-699				

4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 3,3-dimethyl-7-oxo-6-(((((2-oxo-1-imidazolidinyl)carbonyl)amino)phenylacetyl)amino)-, (2S-(2alpha,5alpha,6beta(S*)))-
37091-66-0
C20-H25-N5-O6-S
MW 461.54

Tissue	Cases Exposure Route	Range	Mean	General Information
11404 Blood, serum	10 Injection	226-615 ug/ml	364+/-38.8 ug/ml S.E.	Range of peaks 5 min after 58-87 mg/kg dose, given as 20-50 min IV. Level about 16 ug/ml at 8 hr 350 mg/kg/d given for 9-23 d. Therapy also included an aminoglycoside, and intensive pulmonary toilet. All patients responded favorably. Other pharmacokinetic data presented. Some values estimated from figure. Patients with acute pulmonary exacerbation of cystic fibrosis, mean age 18.7, mean wt 38.8 kg, University of Utah Pediatrics Ward Bioassay
BLOOD SERUM; DELIBERATE EXPOSURE; UTAH; INFECTION; ANTIBIOTICS; DRUGS; METABOLISM; DRUG THERAPY				
Bosso, J.A.; Saxon, B.A.; Herbst, J.J.; Matsen, J.M. 1984 Antimicrobial Agents and Chemotherapy 25(5):630-633				

4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 6-((((((4-ethyl-2,3-dioxo-1-piperazinyl)carbonyl)amino)phenylacetyl)amino)-3,3-dimethyl-7-oxo-, (2S-(2alpha,5alpha,6beta(S*)))-
61477-96-1
C23-H27-N5-O7-S
MW 517.61

Tissue	Cases Exposure Route	Range	Mean	General Information
11406 Blood, plasma	50 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given	a) 283.4+/-86.2 mg.hr/l b) 169.0+/-61.5 mg.hr/l c) 147.5+/-52.7 mg.hr/l d) 153.0+/-37.9 mg.hr/l e) 152.2+/-40.7 mg.hr/l f) 176.0+/-58.8 mg.hr/l g) 216.3+/-90.5 mg.hr/l	a) 1-6 mo, 6 subjects b) 6 mo-12 yr, 44 subjects c) 6 mo-1 yr, 9 subjects d) 1-2 yr, 9 subjects e) 2-5 yr, 7 subjects f) 5-10 yr, 11 subjects g) 10-12 yr, 8 subjects Area-under-curve after 50 mg/kg IV Children, 1 mo-12 yr old. HPLC
BLOOD PLASMA; SYNOVIAL FLUID; CEREBROSPINAL FLUID; URINE; DELIBERATE EXPOSURE; INFANTS; CHILDREN; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; AGE				
Thirumoorthi, M.C.; Asmar, B.I.; Buckley, J.A.; Bollinger, R.O.; Kauffman, R.E.; Dajani, A.S. 1983 Journal of Pediatrics 102:941-946				

Tissue	Cases Exposure Route	Range	Mean	General Information
11406 Blood, plasma	a) 7 b) 5 c) 7 d) 5 e) 7 f) 5 g) 7 h) 5 Injection	a) 600-3 mg/l b) 600-40 mg/l c) 450-50 mg/l d) 400-100 mg/l e) 125-2 mg/l f) 150-4 mg/l g) 150-10 mg/l h) 150-25 mg/l	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable	a) Control, 15 mg/kg IV b) Mild renal insufficiency (RI), 15 mg/kg IV c) Moderate RI, 15 mg/kg IV d) Severe RI, 15 mg/kg IV e) Control, 3 mg/kg IV f) Mild RI, 3 mg/kg IV g) Moderate RI, 3 mg/kg IV h) Severe RI, 3 mg/kg IV 0-8 hr study, peaks at end of infusion, insufficiency defined as level of creatinine clearance (mild 31-60 ml/min, moderate 11-30 ml/min, severe <10 ml/min). Volunteers, normal or with mild to severe renal insufficiency Well-diffusion assay
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; INFECTION; KIDNEY DISEASES; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION				
Aronoff, G.R.; Sloan, R.S.; Brier, M.E.; Luft, F.C. 1983 European Journal of Clinical Pharmacology 24:543-547				

Tissue	Cases Exposure Route	Range	Mean	General Information
11407 Blood, serum	10 Injection	a) Not given b) Not given c) Not given d) Not given	a) 201.3+/-32.2 ug/ml b) 41.4+/-10.2 ug/ml c) 5.0+/-3.0 ug/ml d) 1.0+/-0.7 ug/ml	a) 5 min after 2 gm IV b) 1 hr c) 4 hr d) 6 hr At 8 hr only 3 cases >0.3 ug/ml (detection limit). 23-44 yr old (mean 30.4 yr) healthy volunteers Agar diffusion; HPLC
BLOOD SERUM; ANTIBIOTICS; DELIBERATE EXPOSURE; DRUGS; DRUG THERAPY; ADULTS				
Lode, H.; Elvers, A.; Koeppe, P.; Borner, K. 1984 Antimicrobial Agents and Chemotherapy 25(1):105-108				

4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 6-(((((4-ethyl-2,3-dioxo-1-piperazinyl)carbonyl)amino)phenylacetyl)amino)-3,3-di methyl-7-oxo-, (2S-(2alpha,5alpha,6beta(S*)))-

61477-96-1
C23-H27-N5-O7-S
MW 517.61

Tissue	Cases Exposure Route	Range	Mean	General Information
11408 Cerebrospinal fluid	4 Injection	Not given	3.5 mg/l	105 min after 50 mg/kg IV, plasma level 44.5 mg/l at same time. Children, 1 mo-12 yr old. HPLC
11409 Synovial fluid	4 Injection	Not given	40.6 mg/l	150 min after 50 mg/kg IV, plasma level 17.8 mg/l at same time. Children, 1 mo-12 yr old. HPLC
11410 Urine	10 Injection	30-88%	61.6+/-17.0%	Recovery 4 hr after 50 mg/kg IV Children, 1 mo-12 yr old. HPLC

BLOOD PLASMA; SYNOVIAL FLUID; CEREBROSPINAL FLUID; URINE; DELIBERATE EXPOSURE; INFANTS; CHILDREN; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; AGE

Thirumoorthi, M.C.; Asmar, B.I.; Buckley, J.A.; Bollinger, R.O.; Kaufman, R.E.; Dajani, A.S. 1983 Journal of Pediatrics 102:941-946

Tissue	Cases Exposure Route	Range	Mean	General Information
11411 Urine	a) 7 b) 5 c) 7 d) 7 e) 5 f) 7 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 69+/-15% b) 49+/-16% c) 55+/-14% d) 58+/-15% e) 35+/-4% f) 55+/-15%	a) Control, 15 mg/kg b) Mild renal insufficiency (RI), 15 mg/kg c) Moderate RI, 15 mg/kg d) Control, 60 mg/kg e) Mild RI, 60 mg/kg f) Moderate RI, 60 mg/kg % dose excreted in 48 hr. Insufficiency defined as level of creatinine clearance (mild 31-60 ml/min, moderate 11-30 ml/min). Volunteers, normal or with mild to severe renal insufficiency Well-diffusion assay

BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; INFECTION; KIDNEY DISEASES; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION

Aronoff, G.R.; Sloan, R.S.; Brier, M.E.; Luft, F.C. 1983 European Journal of Clinical Pharmacology 24:543-547

4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 6-((((((4-hydroxy-1,5-naphthyridin-3-yl)carbonyl)amino)phenylacetyl)amino)-3,3-di methyl-7-oxo-, (2S-(2alpha,5alpha,6beta(S*)))-
63469-19-2
C25-H28-N5-O6-S

Tissue	Cases Exposure Route	Range	Mean	General Information
11412 Blood, serum	10 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 218.6+/-39.6 ug/ml b) 59.2+/-14.8 ug/ml c) 7.1+/-5.6 ug/ml d) 0.8+/-0.7 ug/ml e) 0.3+/-0.3 ug/ml	a) 5 min after 2 gm IV b) 1 hr c) 4 hr d) 10 hr, 4 cases. Other 6 below detection limit (0.3 ug/ml). 23-44 yr old (mean 30.4 yr) healthy volunteers Agar diffusion; HPLC
BLOOD SERUM; ANTIBIOTICS; DELIBERATE EXPOSURE; DRUGS; DRUG THERAPY; ADULTS Lode, H.; Elverz, A.; Koeppe, P.; Borner, K. 1984 Antimicrobial Agents and Chemotherapy 25(1):105-108				

4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 6-(((hexahydro-1H-azepin-1-yl)methylene)amino)-3,3-dimethyl-7-oxo-, (+)- (8 CI); 4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 6-(((hexahydro-1H-azepin-1-yl)methylene)amino)-3,3-dimethyl-7-oxo-, (2S-(2alpha,5alpha,6beta))- (9 CI)
82667-01-7
C15-H23-N3-O3-S

Tissue	Cases Exposure Route	Range	Mean	General Information
11413 Blood, plasma	10 Injection	a) 50-0 ug/ml b) 18-0 ug/ml c) 85-0 ug/ml d) 37-0 ug/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) 0.25-6 hrs, rapid decline from 50-10 ug/ml by 1 hr, moderate decline thereafter, after 10 mg/kg IV b) 0.25-6 hrs, peak (25 ug/ml) at 0.5 hr after 10 mg/kg IM c) 0.25-6 hrs, rapid decline from 85-10 ug/ml in 2 hr, moderate decline thereafter, following 15 mg/kg IV d) 0.25-6 hrs, peak (20 ug/ml) at 0.5 hr after 15 ug/kg IM. Healthy volunteers, 5 males, 5 females, 26-65 yr old Microbiological
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION Meyers, B.R.; Jacobson, J.; Masci, J.; Srulevitch, E.; Hirschman, S.Z. 1983 Antimicrobial Agents and Chemotherapy 23(6):827-830				

4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 6-(((hexahydro-1H-azepin-1-yl)methylene)amino)-3,3-dimethyl-7-oxo-, hydroxymethyl ester pivalate (ester), (+)- (8 CI); 4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 6-(((hexahydro-1H-azepin-1-yl)methylene)amino)-3,3-dimethyl-7-oxo-, (2,2-dimethyl-1-oxopropoxy)methyl ester, (2S-(2alpha,5alpha,6beta))- (9 CI)
52886-97-6
C21-H33-N3-O6-S

Tissue	Cases Exposure Route	Range	Mean	General Information
11414 Urine	46 Ingestion	a) Not given b) Not given	a) 26.4+/-1.5% b) 28.7+/-1.4% % of dose	a) First dose b) 21st dose Mean recovery, 0-8 hr after 400 mg pivmecillinam and 500 mg cefuroxime. Dosing regimen: 2X/d on d 1, 3X/d on d 2-7, 1X/d on d 8. Doses after meals, approximately 6 hr apart. Healthy volunteers HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; ANTIBIOTICS; DRUGS Sommers, D.K.; Wyk, M.V.; Williams, P.E.O.; Harding, S.M. 1984 Antimicrobial Agents and Chemotherapy 25(3):344-347				

4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 6-((aminophenylacetyl)amino)-3,3-dimethyl-7-oxo, 1-((ethoxycarbonyl)oxy)ethyl ester, monohydrochloride, (2S-(2alpha,5alpha,6beta(S*)))-
37661-08-8
C21-H27-N3-O7-S.Cl-H

Tissue	Cases Exposure Route	Range	Mean	General Information
11415 Blood, plasma	12 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 8.7+/-1.6 mg/L b) 8.3+/-2.0 mg/L c) 7.1+/-1.0 mg/L d) 4.0+/-0.94 mg/L	a) Dissolution half-life (in vitro) of drug 2.5 min b) 5 min c) 12.5 min d) 22 min Peaks after 400 mg in microencapsulated form with 4 different coating thicknesses, in aqueous suspension. Absorption rate tends to increase with decrease in dissolution half-life. Other pharmacokinetic data and sensory evaluations also reported. Healthy nonobese 28-37 yr old volunteers, Sweden Bioassay
BLOOD PLASMA; DELIBERATE EXPOSURE; SWEDEN; ANTIBIOTICS; DRUGS Sjovall, J.; Sjoqvist, R.; Hultfeldt, B.; Nyqvist, H. 1984 Journal of Pharmaceutical Sciences 73(2):141-145				

4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 6-((carboxy-3-thienylacetyl)amino)-3,3-dimethyl-7-oxo-, (2S-(2alpha,5alpha,6beta(S*)))-
34787-01-4
C15-H16-N2-O6-S2
MW 384.45

Tissue	Cases Exposure Route	Range	Mean	General Information
11416 Blister fluid	6 Injection	57.9+/-44.9.6+/-8.1 ug/ml	Not applicable	0.5-8 hr, peak (92.6+/-46.6 ug/ml) at 1.0 hr after 3 g plus 0.2 g clavulanic acid in 20 ml water. Healthy volunteers, 24-40 yr old, mean wt 78.7+/-8.1 kg, ht 1.78+/-0.07 Well diffusion assay

(next page)

4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 6-((carboxy-3-thienylacetyl)amino)-3,3-dimethyl-7-oxo-, (2S-(2alpha,5alpha,6beta(S*)))-
34787-01-4
C15-H16-N2-O6-S2
MW 384.43

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
11417 Blood, serum	6 Injection	277.1+/-177.6-1.7+/-0.7 ug/ml	Not applicable	15 min-8 hr, peak (277.1+/-117.6 ug/ml) immediately after 3 g plus 0.3 g clavulanic acid in 20 ml water. Healthy volunteers, 24-40 yr old, mean wt 78.7+/-8.1 kg, ht 1.78+/-0.07 Well diffusion assay
11418 Urine	6 Injection	Not given	78.6+/-18.5%	% dose recovered in 24 hr after 3 g plus 0.3 g clavulanic acid in 20 ml water. Healthy volunteers, 24-40 yr old, mean wt 78.7+/-8.1 kg, ht 1.78+/-0.07 Well diffusion assay
BLOOD SERUM; BLISTER FLUID; DELIBERATE EXPOSURE; ADULTS; UNITED KINGDOM; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; URINE				
Bennett, S.; Wise, R.; Weston, D.; Dent, J. 1983 Antimicrobial Agents and Chemotherapy 23(6):831-834				

4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 6-(2-amino-2-(p-hydroxyphenyl)acetamido)-3,3-dimethyl-7-oxo-, D- (8 CI) 4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 6-((amino(4-hydroxyphenyl)acetyl)amino)-3,3-dimethyl-7-oxo, (2S-(2alpha,5alpha,6beta(S*)))- (9 CI)
26787-78-0
C16-H19-N3-O5-S
MW 365.41, MP 194 C (beta-Naphthalenesulfonate trihydrate)

Tissue	Cases Exposure Route	Range	Mean	General Information
11419 Blood, plasma	1 Ingestion	0.5-6.5 ug/ml	Not given	At 6.5 hr and 2 hr 2.4 ug/ml at 1 hr, following single dose of 500 mg. HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; DRUGS; ANTIBIOTICS; MEASUREMENT METHODS				
Lee, T.L.; Brooks, M.A. 1984 Journal of Chromatography 306:429-435				

4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 6-(2-amino-2-phenylacetamide)-3,3-dimethyl-7-oxo-, hydroxymethyl ester pivalate (ester), D-(-)- (8 CI); 4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 6-((aminophenylacetyl)amino)-3,3-dimethyl-7-oxo, (2,2-dimethyl-1-oxopropoxy)methyl ester, (2S-(2alpha,5alpha,6beta(S*)))- (9 CI)
33817-20-8
C22-H29-N3-O6-S
MW 463.55

Tissue	Cases Exposure Route	Range	Mean	General Information
11420 Urine	47 Ingestion	a) Not given b) Not given	a) 45.0+/-2.6% b) 46.3+/-3.2% % of dose	a) First dose b) 21st dose Mean recovery, 0-8 hr after 500 mg pilmecillinam and 500 mg cefuroxime. Dosing regimen: 2X/d on d 1, 3X/d on d 2-7, 1X/d on d 8. Doses after meals, approximately 6 hr apart. Healthy volunteers HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; ANTIBIOTICS; DRUGS Sommers, D.K.; Wyk, M.V.; Williams, P.E.O.; Harding, S.M. 1984 Antimicrobial Agents and Chemotherapy 25(3):344-347				

4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 6-(2-amino-2-phenylacetamido)-3,3-dimethyl-7-oxo, D-(-)- (8 CI) 4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 6-((aminophenylacetyl)amino)-3,3-dimethyl-7-oxo-, (2S-(2alpha,5alpha,6beta(S*)))- (9 CI)
69-53-4
C16-H19-N3-O4-S
MW 349.42

Tissue	Cases Exposure Route	Range	Mean	General Information
11421 Blood, plasma	6 Ingestion	a) 1.15-0.15 ug/ml b) 0.3-0.15 ug/ml c) 0.1-0.15 ug/ml	a) Not given b) Not given c) Not given	a) Buffered tablet. Peak 2.4 ug/ml at 30 min b) Soft gelatin capsule. Peak 2.8 ug/ml at 1.5 hr c) Standard gelatin capsule. Peak 2.1 ug/ml at 1.5 hr 15 min and 8 hr after 250 mg Sarpicillin base. Estimated from graph. Healthy volunteers Agar-diffusion
BLOOD PLASMA; URINE; SALIVA; DELIBERATE EXPOSURE; ADULTS; DRUGS; ANTIBIOTICS; COMPARATIVE EVALUATIONS Stavchansky, S.; Peariman, R.S.; Van Harben, D.R.; Smyth, R.D.; Hottendorf, G.H.; Martin, A.; Newburger, J.; Schneider, L.W. 1984 Journal of Pharmaceutical Sciences 73(2):168-172				

Tissue	Cases Exposure Route	Range	Mean	General Information
11422 Blood, serum	6 Ingestion	a) 1.7-0 mg/l b) 1.5-0.2 mg/l	a) Not applicable b) Not applicable	a) First dose. Peak 4.4 mg/l (1.5-6.9) at 3.0 hr (1.5-5.0) b) 21st dose. Peak 5.2 mg/l (1.5-11.5) at 2.4 hr (1.5-3.5) 30 min and 8 hr after 500 mg dose. Dosing regimen: 2X/d on d 1, 3X/d on d 2-7, 1X/d on d 8. Doses after meals, approximately 6 hr apart. Estimated from graph. Healthy volunteers HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; ANTIBIOTICS; DRUGS Sommers, D.K.; Wyk, M.V.; Williams, P.E.O.; Harding, S.M. 1984 Antimicrobial Agents and Chemotherapy 25(3):344-347				

4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 6-(2-amino-2-phenylacetamido)-3,3-dimethyl-7-oxo, D-(-)-
(8 CI) 4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 6-((aminophenylacetyl)amino)-3,3-dimethyl-7-oxo-, (2S-(2alpha,5alpha,6beta(S*)))-
(9 CI)
69-53-4
C16-H19-N3-O4-S
MW 349.42

Tissue	Cases Exposure Route	Range	Mean	General Information
11423 Blood, serum	16 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 0.8 mg/l b) 2.6 mg/l c) 0.6 mg/l d) <0.06 mg/l e) 0.7+/-0.2 mg/l f) 3.2+/-0.5 mg/l g) 1.6+/-1.1 mg/l h) 3.7+/-0.5 mg/l S.E.	a) 40 min after single 250 mg dose after food, 12 cases b) 2 hr c) 5 hr d) 7 hr e) 30 min after 1st of 10 doses, 250 mg every 6 hr for 5 d, fasting, 6 cases f) 120 min after 1st dose g) 30 min after 13th dose h) 120 min after 13th dose a-d) estimated from graph. Healthy volunteers, 20-48 yr, 46-101 kg Diarrhea, maculopapular rash Change in stool flora HPLC
ANTIBIOTICS; DRUGS; ADULTS; BIOAVAILABILITY; COMPARATIVE EVALUATIONS; DELIBERATE EXPOSURE; URINE; BLOOD SERUM; METABOLITES Harding, S.M.; Williams, P.E.O.; Ayrton, J. 1984 Antimicrobial Agents and Chemotherapy 25(1):78-82				

Tissue	Cases Exposure Route	Range	Mean	General Information
11424 Saliva	6 Ingestion	a) 0.16-0 ug/ml b) 0.01-0 ug/ml c) 0.01-0 ug/ml	a) Not given b) Not given c) Not given	a) Buffered tablet. Peak 0.2 ug/ml at 30 min b) Soft gelatin capsule. Peak 0.15 ug/ml at 45 min c) Standard gelatin capsule. Peak 0.1 ug/ml at 1 hr 15 min and 3 hr after 250 mg sarpicillin base. Estimated from graph. Healthy volunteers Agar-diffusion
11425 Urine	6 Ingestion	a) Not given b) Not given c) Not given	a) 85 mg b) 105 mg c) 120 mg	a) Buffered tablet b) Soft gelatin capsule c) Standard gelatin capsule Cumulative excretion for 24 hr after 250 mg sarpicillin base. Estimated from graph. Healthy volunteers Agar-diffusion
BLOOD PLASMA; URINE; SALIVA; DELIBERATE EXPOSURE; ADULTS; DRUGS; ANTIBIOTICS; COMPARATIVE EVALUATIONS Stavchansky, S.; Pearlman, R.S.; Van Harken, D.R.; Smyth, R.D.; Hottendorf, G.H.; Martin, A.; Newburger, J.; Schneider, L.W. 1984 Journal of Pharmaceutical Sciences 73(2):169-173				

4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 6-(2-amino-2-phenylacetamido)-3,3-dimethyl-7-oxo, D-(-)-
(8 CI) 4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 6-((aminophenylacetyl)amino)-3,3-dimethyl-7-oxo-, (2S-(2alpha,5alpha,6beta(S*)))-
(9 CI)
69-53-4
C16-H19-N3-O4-S
MW 349.43

Tissue	Cases Exposure Route	Range	Mean	General Information
11426 Urine	8 Ingestion	a) 17.5-52.6% b) 15.5-57.2% % of dose	a) 33.3% b) 35.2% % of dose	a) First dose b) 21st dose Mean recoveries, 0-8 hr after 500 mg. Dosing regimen: 2X/d on d 1, 3X/d on d 2-7, 1X/d on d 8. Doses after meals, approximately 6 hr apart. Healthy volunteers HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; ANTIBIOTICS; DRUGS				
Sommers, D.K.; Wyk, M.V.; Williams, P.E.O.; Harding, S.M. 1984 Antimicrobial Agents and Chemotherapy 25(3):344-347				

Tissue	Cases Exposure Route	Range	Mean	General Information
11427 Urine	24 Ingestion	a) 17.0-30.0% b) 1.7-6.2% c) 16-51% % of dose	a) 26.4+/-1.6% b) 5.8+/-0.6% c) Not given % of dose S.E.	a) 0-4 hr, 250 mg after food b) 4-8 hr, 250 mg after food c) 6th hr, 250 mg every 6 hr for 5 d, estimated from graph Compared with cefuroxime axetil, recoveries were lower after food and variation in recovery over 5 d was greater. Healthy volunteers, 20-48 yr, 48-101 kg HPLC
ANTIBIOTICS; DRUGS; ADULTS; BIOAVAILABILITY; COMPARATIVE EVALUATIONS; DELIBERATE EXPOSURE; URINE; BLOOD SERUM; METABOLITES				
Harding, S.M.; Williams, P.E.O.; Ayrton, J. 1984 Antimicrobial Agents and Chemotherapy 25(1):78-82				

4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 6-(2-ethoxy-1-naphthamido)-3,3-dimethyl-7-oxo- (8 CI) 4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 6-(((2-ethoxy-1-naphthalenyl)carbonyl)amino)-3,3-dimethyl-7-oxo-, (2S-(2alpha,5alpha,6beta))- (9 CI)
147-52-4
C21-H22-N2-O4-S
MW 414.51

Tissue	Cases Exposure Route	Range	Mean	General Information
11428 Blood, serum	0 Injection	a) Not given b) Not given	a) 22.5+/-2.2 ug/ml b) 20.6+/-3.0 ug/ml	a) 500 mg nafcillin b) Same dose plus 1 g aztreonam Maxima after 30 min infusion. Healthy subjects, caucasian, average age 24 yrs, ht 178 cm, wt 74 kg HPLC
11429 Urine	0 Injection	a) Not given b) Not given	a) 31.3+/-6.6% b) 34.6+/-4.5%	a) 500 mg nafcillin b) Same dose plus 1 g aztreonam % dose excreted in 24 hrs after 30 min infusion. Healthy subjects, caucasian, average age 24 yrs, ht 178 cm, wt 74 kg HPLC
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ANTIBIOTICS; COMPARATIVE EVALUATIONS; DRUG INTERACTION; DRUGS				
Creasey, W.A.; Adamovics, J.; Dhruv, R.; Piat, T.B.; Sugerman, A.A. 1984 Journal of Clinical Pharmacology 24:176-180				

4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 6-(3-(o-chlorophenyl)-5-methyl-4-isoxazolecarboxamido)-3,3-dimethyl-7-oxo- (8 CI); 4-Thia-1-azabicyclo(3.2.0)heptane-2-carboxylic acid, 6-(((3-(2-chlorophenyl)-5-methyl-4-isoxazolyl)carbonyl)amino)-3,3-dimethyl-7-oxo -, (2S-(2alpha,5alpha,6beta))- (9 CI)
61-72-3
C19-H18-Cl-N3-O5-S
MW 435.88

Tissue	Cases Exposure Route	Range	Mean	General Information
11480 Blood, serum	36 Ingestion Injection	a) 200-7 mg/l b) 150-2 mg/l c) 55 mg/l-5 mg/l d) 17 mg/l-1 mg/l	a) Not given b) Not given	a) 12 controls, 20 and 240 min after 25 mg/kg IV dose b) 16 cystic fibrosis patients, 20 and 240 min after 25 mg/kg IV dose c) 12 controls, 1 and 5 hr after 25 mg/kg oral dose d) 16 patients, 75 min and 5 hr after 25 mg/kg oral dose Estimated from graph. Healthy controls, 22.2+/-1.0 yr old, 67.3+/-13.0 Kg and cystic fibrosis patients, 14.2+/-3.3 yr old and 40.8+/-9.2 Kg, Canada HPLC
11481 Urine	36 Ingestion Injection	a) Not given b) Not given c) Not given d) Not given	a) 0.644+/-0.155 b) 0.547+/-0.253 c) 0.290+/-0.114 d) 0.196+/-0.103 As amt/dose	a) 12 controls, 20 and 240 min after 25 mg/kg IV dose b) 16 cystic fibrosis patients, 20 and 240 min after 25 mg/kg IV dose c) 12 controls, 1 and 5 hr after 25 mg/kg oral dose d) 16 patients, 75 min and 5 hr after 25 mg/kg oral dose Healthy controls, 22.2+/-1.0 yr old, 67.3+/-13.0 Kg and cystic fibrosis patients, 14.2+/-3.3 yr old and 40.8+/-9.2 Kg, Canada HPLC

BLOOD SERUM; URINE; DELIBERATE EXPOSURE; CONSUMER EXPOSURE; CANADA; CHILDREN; ADOLESCENTS; DISEASES; ANTIBIOTICS

Spino, M.; Chai, R.P.; Isles, A.F.; Thiessen, J.J.; Tesoro, A.; Gold, R.; MacLeod, S.M. 1984 Journal of Pediatrics 105(5):829-835

4-Thiazolecarboxamide, 2-beta-D-ribofuranosyl-
60084-10-8
C9-H12-N2-O5-S

Tissue	Cases Exposure Route	Range	Mean	General Information
11482 Urine	1 Injection	a) 272.41-308.10 ug/ml b) 11.36-17.75 ug/ml	a) 322.86 ug/ml b) 13.65 ug/ml h	a) Total daily excretion b) Average hourly excretion Over 7 d following IV dose of 550 mg/sq m daily for 5 d. Assay modification. HPLC

URINE; DELIBERATE EXPOSURE; DRUG THERAPY; DRUGS; CHEMOTHERAPY; BIOLOGICAL MONITORING

Meltzer, N.M.; Sternson, L.A. 1984 Journal of Chromatography 307:215-219

4,6(1H,5H)-Pyrimidinedione, 5-ethyldihydro-5-(1-methylbutyl)-2-thioxo-
76-75-5
C11-H18-N2-O2-S
MW 242.34, MP 159 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11433 Blood	a) 1 b) 9	a) Not applicable b) 0.8-2.4 mg/l	a) 3.0 mg/l b) 1.5 mg/l	a) From single-drug death, 1975-1980 b) Non-drug related deaths, 1975-1980. Autopsy, Maryland State Medical Examiners office.
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Tissue	Cases Exposure Route	Range	Mean	General Information
11484 Blood, plasma	Injection	7-0.5 ug/ml	Not applicable	0-360 min, peak (7 ug/ml) 5 min after 3.4 mg IV. New assay. Patients undergoing minor orthopedic surgery HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; SWEDEN; ANESTHETICS; MEASUREMENT METHODS; BIOACCUMULATION; DRUG THERAPY; DRUGS; SURGERY Bjorkman, S.; Idvall, J. 1984 Journal of Chromatography 307:481-487				

4,6(1H,5H)-Pyrimidinedione, 5-ethyldihydro-5-phenyl-
125-33-7
C12-H14-N2-O2
MW 218.26, MP 261-263 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11485 Blood	7	6.4-19 mg/l	10.6 mg/l	Non-drug deaths, 1975-1980. Autopsy, Maryland State Medical Examiner's office Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

4,6(1H,5H)-Pyrimidinedione, 5-ethyldihydro-5-phenyl-
125-88-7
C12-H14-N2-O2
MW 218.25, MP 281-282 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11486 Blood, serum	5	a) 6-26 umol/l b) 10-42 umol/l	a) 16.4 umol/l b) 19.8 umol/l	a) Day 56. Concomitant with 13.7 mg/kg carbamazepine in 3 doses/d wk 1-4, and 2/d wk 5-8 b) Day 84. With carbamazepine 1X/d during wk 9-12 Ranges of means at 7-8 hr, before medication. Daily dose of 500-1000 mg primidone/patient, and regimen, unaltered during 12 wk. Total daily carbamazepine constant. 16-18 yr old epileptics
BLOOD SERUM; DELIBERATE EXPOSURE; CENTRAL NERVOUS SYSTEM DISEASES; ANTICONVULSANTS; DRUG INTERACTION; DRUG THERAPY; DRUGS; COMPARATIVE EVALUATIONS; METABOLISM; METABOLITES Ghose, K.; Fry, D.E.; Christides, J.A. 1983 European Journal of Clinical Pharmacology 24:375-381				

4'-Demethylepipodophyllotoxin ethylidene-beta-D-glucoside
88419-42-0
C29-H32-O14
MW 604.61

Tissue	Cases Exposure Route	Range	Mean	General Information
11487 Blood	8 Injection	35-1 ug/ml	Not given	30 min and 24 hr after 200 mg/sq m/d IV. Pharmokinetic data also given. 4.2-22 yr old patients, St Jude Children's Research Hospital, Memphis, TN Leukopenia and thrombocytopenia HPLC
BLOOD; URINE; DELIBERATE EXPOSURE; TENNESSEE; CHILDREN; ADOLESCENTS; NEOPLASMS; ANTITUMOR AGENTS; CHEMOTHERAPY Sinkule, J.A.; Hutson, P.; Hayes, F.A.; Etcubanas, E.; Evans, W. 1984 Cancer Research 44:3109-3113				

Tissue	Cases Exposure Route	Range	Mean	General Information
11488 Blood, plasma	a) 4 b) 4 c) 8 d) 1 Injection	a) 26-53 ug/ml b) 27-73 ug/ml c) 42-114 ug/ml d) Not applicable	a) Not applicable b) Not applicable c) Not applicable d) 72 ug/ml	a) 400 mg/sq m/d b) 500 mg/sq m/d c) 600 mg/sq various times up to 24 hr post-infusion. Cancer patients, <65 yr old Myelosuppression at high doses HPLC
11489 Brain	1 Injection	a) Not applicable b) Not applicable	a) 1.2 ug/ml b) 2.5 ug/ml	a) Immediately after 3 hr infusion, 500 mg/sq m b) 4 hr after infusion Fluid from cystic brain tumor. Cancer patients, <65 yr old Myelosuppression at high doses HPLC

(next page)

4'-Demethylepipodophyllotoxin ethylidene-beta-D-glucoside
88419-42-0
C29-H32-O14
MW 604.61

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
11440 Cerebrospinal fluid	4 Injection	0.1-1.4 ug/ml	Not applicable	6 samples during 8 hr post-infusion of 400-800 mg/sq m. Cancer patients, <65 yr old Myelosuppression at high doses HPLC
11441 Pleural fluid	1 Injection	Not applicable	1.8 ug/ml	16 hr after 8-hr infusion 800 mg/sq m. Cancer patients, <65 yr old Myelosuppression at high doses HPLC
ANTITUMOR AGENTS; DELIBERATE EXPOSE; BLOOD PLASMA; PLEURAL FLUID; CEREBROSPINAL FLUID; URINE; DRUGS; DRUG THERAPY; CARCINOMAS; NEOPLASMS; CHEMOTHERAPY; BRAIN Hande, K.R.; Wedlund, P.J.; Noone, R.M.; Wilkinson, G.R.; Greco, F.A.; Wolff, S.N. 1984 Cancer Research 44:379-382				

Tissue	Cases Exposure Route	Range	Mean	General Information
11442 Urine	6 Injection	55-61% of dose	58.35+/-15.2 % of dose	24 hr total after 200 mg/sq m/d IV. Pharmokinetic data also given. 4.2-22 yr old patients, St Jude Children's Research Hospital, Memphis, TN Leukopenia and thrombocytopenia HPLC
BLOOD; URINE; DELIBERATE EXPOSURE; TENNESSEE; CHILDREN; ADOLESCENTS; NEOPLASMS; ANTITUMOR AGENTS; CHEMOTHERAPY Sinkule, J.A.; Hutson, P.; Hayes, F.A.; Etcubanas, E.; Evans, W. 1984 Cancer Research 44:5109-5113				

4'-Hydroxybutobarbitone (No postings in CHEMLINE).

Tissue	Cases Exposure Route	Range	Mean	General Information
11443 Urine	1 Ingestion	a) Not given b) Not given c) Not given	a) 7.4% b) 4% c) 67%	a) Parent drug b) 4'-oxo-form c) W-acid-form % recovery of 15 mg in 24 hr. Healthy volunteers GLC/MS
URINE; DELIBERATE EXPOSURE; ADULTS; SEDATIVES; DRUG ABUSE; DRUGS; DRUG THERAPY; BIOACCUMULATION; METABOLISM; METABOLITES Al Sharif, M.A.; Gilbert, J.N.T.; Powell, J.W. 1983 Xenobiotica 13(3):179-183				

4H-(1,2,4)Triazolo(4,3-a)(1,4)benzodiazepine-1-methanamine, 8-chloro-N,N-dimethyl-6-phenyl-
57116-32-5
C19-H18-Cl-N5

Tissue	Cases Exposure Route	Range	Mean	General Information
11444 Blood, plasma	1 Ingestion	a) 280-9 ng/ml b) 250-15 ng/ml	a) Not applicable b) Not applicable	a) Parent drug, peak, 300 mg/ml at 1 hr b) N-dimethyl metabolite, peak, 350 ng/ml at 1 hr 0.5 and 24 hr after 30 mg. Estimated from graph. Volunteer LC
BLOOD PLASMA; DELIBERATE EXPOSURE; DEPRESSION; ANTIDEPRESSIVE AGENTS; MEASUREMENT METHODS; DRUGS; METABOLITES Peng, G.W. 1984 Journal of Pharmaceutical Sciences 73(8):1173-1175				

4H-Imidazo(1,5-a)(1,4)benzodiazepine, 8-chloro-6-(2-fluorophenyl)-1-methyl
59467-70-8
C18-H13-Cl-F-N3
MW 325.78

Tissue	Cases Exposure Route	Range	Mean	General Information
11445 Amniotic fluid	5	0-2 ng/ml	Not given	During 45 min after 0.05 mg/kg IM. 5 cases Sedative anxiolytic premedication for cesarean section. 15 mg, oral to 8 subjects, detectable in 1 case at 1.5 ng/ml. 18-40 yr olds, pregnancies in 38-41 wk gestation GC
BLOOD SERUM; AMNIOTIC FLUID; UMBILICAL CORD; DELIBERATE EXPOSURE; FETUS; NEWBORN; BENZODIAZEPINES; DRUG THERAPY; DRUGS; SEDATIVES; COMPARATIVE EVALUATIONS; METABOLISM; PREGNANCY; TRANSPLACENTAL TRANSFER Kanto, J.; Sjovall, S.; Erkkola, R.; Himberg, J.-J.; Kangas, L. 1983 Clinical Pharmacology and Therapeutics 33(6):786-791				

Tissue	Cases Exposure Route	Range	Mean	General Information
11446 Blood, plasma	3 Injection	a) 300-15 ug/l b) 200-20 ug/l c) 400-25 ug/l	a) Not given b) Not given c) Not given	a) 5 and 88 hr after last dose. Daily doses of 5, 40, 40, 70, 45, & 5 mg. 68 yr old male with cardiac failure and pneumonia. Regained consciousness 6 d after last dose. Also given papaveretum b) 5 and 35 hr after last dose. Daily doses of 11.5, 32.5, 26.5, & 8 mg. 46 mo old female after heart surgery. Conscious 18 hr after last dose. Also given papaveretum and chloral hydrate c) 5 and 78 hr after last dose. Daily doses of 75, 102.5, 40, 40, 60 & 20 mg. 56 yr old male with brittle asthma. Alert 1 d after last dose Also receiving erythromycin. Patients requiring intermittent positive pressure ventilation GLC
BLOOD PLASMA; DELIBERATE EXPOSURE; CHILDREN; ADULTS; SEDATIVES; DRUGS; DRUG THERAPY Byatt, C.M.; Lewis, L.D.; Dawling, S.; Cochrane, G.M. 1984 British Medical Journal 289:799-800				

4H-Imidazo(1,5-a)(1,4)benzodiazepine, 8-chloro-6-(2-fluorophenyl)-1-methyl
59467-70-8
C18-H13-Cl-F-N3
MW 325.78

Tissue	Cases Exposure Route	Range	Mean	General Information
11447 Blood, plasma	6 Ingestion Injection	a) 291-425 ng/ml b) 9-30 ng/ml c) 82-170 ng/ml d) <4-8 ng/ml e) 126-368 ng/ml f) 7-26 ng/ml g) 953-1449 ng/ml h) 34-69 ng/ml i) 16-30 ng/ml j) 60-80 ng/ml k) 70-249 ng/ml l) 356-407 ng/ml	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given k) Not given l) Not given	a) Peak, 5 min after 0.15 mg/kg IV b) 6 hr after 0.15 mg/kg IV c) Peak, 15 or 30 min after 10 mg oral d) 6 hr after 10 mg oral e) Peak, 15 or 30 min after 20 mg oral f) 6 hr after 20 mg oral g) Peak, 15 min after 40 mg oral h) 6 hr after 40 mg oral i) Peak alpha-hydroxy-methyl metabolite, 10-30 min after 0.15 mg/kg IV j) Peak metabolite, 15-30 min after 10 mg oral k) Peak metabolite, 15-30 min after 20 mg oral l) Peak metabolite, 15 min after 40 mg oral Metabolite levels at 6 hr <3-15 ng/ml for all doses. Normal, healthy volunteers, 22-27 yr, 55-77 kg GC-EC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; DRUGS; BENZODIAZEPINES; BIOAVAILABILITY; METABOLITES Heizmann, P.; Eckert, M.; Ziegler, W.H. 1983 British Journal of Clinical Pharmacology 16:435-495				

Tissue	Cases Exposure Route	Range	Mean	General Information
11448 Blood, serum	a) 8 b) 5 c) 8 Ingestion Injection	a) 20-0 ng/ml b) 35-0 ng/ml c) 235-0 ng/ml	a) Not given b) Not given c) Not given	a) 0.5-5 hr after 15 mg, oral b) 0.5 and 5 hr after 0.05 mg/kg, IM c) 5 min and 6 hr after 0.075 mg/kg, IV Ranges of means. a), b) received drug as sedative anxiolytic premedication for cesarean section, c) to deepen anesthesia after delivery. Rapid onset, and short duration, of action. Undetectable in fetomaternal entity 10-12 hr after single dose. Wide variation in peaks (9-74 ng/ml), time to peaks (9-45 min) in a). Absorption after IM superior. 18-40 yr olds, pregnancies in 38-41 wk gestation GC
11449 Umbilical cord	13	a) 0-29 ng/ml b) 0-21 ng/ml c) 17-26 ng/ml b) 7-18 ng/ml	a) 8.4+/-9.7 ng/ml b) 5.7+/-7.1 ng/ml c) 21.7+/-4.0 ng/ml d) 12.8+/-5.5 ng/ml	a) During 60 min after 15 mg oral dose, in venous serum. 8 cases b) Arterial serum c) During 45 min after 0.05 mg/kg IM, in venous serum. 5 cases d) Arterial serum Sedative anxiolytic premedication for cesarian section. a) and b) similar to corresponding maternal serum levels. c) and d) lower than maternal levels. 18-40 yr olds, pregnancies in 38-41 wk gestation GC
BLOOD SERUM; AMNIOTIC FLUID; UMBILICAL CORD; DELIBERATE EXPOSURE; FETUS; NEWBORN; BENZODIAZEPINES; DRUG THERAPY; DRUGS; SEDATIVES; COMPARATIVE EVALUATIONS; METABOLISM; PREGNANCY; TRANSPLACENTAL TRANSFER Kanto, J.; Sjovall, S.; Erkkola, R.; Himberg, J.-J.; Kangas, L. 1983 Clinical Pharmacology and Therapeutics 33(6):786-791				

4H-Imidazo(1,5-a)(1,4)benzodiazepine, 8-chloro-6-(2-fluorophenyl)-1-methyl
59467-70-8
C16-H13-Cl-F-N3
MW 325.75

Tissue	Cases Exposure Route	Range	Mean	General Information
11480 Urine	6 Ingestion Injection	a) 64-81% b) 68-81% c) 63-81% d) 69-87%	a) 73+/-6.4% b) 75+/-6.5% c) 72+/-6.4% d) 78%	a) 0.15 mg/kg IV b) 10 mg oral c) 20 mg oral d) 40 mg oral Percent excreted within 24 hrs. Normal, healthy volunteers, 22-27 yr, 55-77 kg
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; DRUGS; BENZODIAZEPINES; BIOAVAILABILITY; METABOLITES Heizmann, P.; Eckert, M.; Ziegler, W.H. 1983 British Journal of Clinical Pharmacology 16:435-495				

4H-s-Triazolo(4,3-a)(1,4)benzodiazepine, 8-chloro-1-methyl-6-phenyl- (8 CI); 4H-(1,2,4)Triazolo(4,3-a)(1,4)benzodiazepine, 8-chloro-1-methyl-6-phenyl- (9 CI)
28981-97-7
C17-H13-Cl-N4

Tissue	Cases Exposure Route	Range	Mean	General Information
11451 Blood, plasma	20 Ingestion	a) Not given b) not given c) 17-1.8 ng/ml d) 19-2.5 ng/ml	a) 18.0+/-4.2 ng/ml b) 21.3+/-4.5 ng/ml c) Not given d) Not given	a) Peaks, at 2.1+/-1.2 hr, controls b) Peaks, at 1.5+/-0.9 hr, oral contraceptive users c) At 3 and 36 hr, controls, range of means d) At 4 and 36 hr, oral contraceptive users, range of means After single 1 mg dose, c) and d) estimated from graph. Healthy adult volunteers, 18.6-28.8 yr, 48.5-61.0 kg GC-EC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; BENZODIAZEPINES; DRUG INTERACTION; HYPNOTICS; METABOLISM; DRUGS Stoehr, G.P.; Kroboth, P.D.; Juhl, R.P.; Wender, D.B.; Phillips, J.P.; Smith, R.B. 1984 Clinical Pharmacology and Therapeutics 36(5):683-690				

Tissue	Cases Exposure Route	Range	Mean	General Information
11452 Blood, plasma				Review. Pharmacokinetic properties and metabolism of benzodiazepines, relating differences among drugs to differences in clinical action. Use as marker compounds for evaluation of changes in metabolizing capacity in old age discussed.
BLOOD PLASMA; DELIBERATE EXPOSURE; AGE; ADULTS; DRUGS; BENZODIAZEPINES; REVIEW; DIAZEPAMS; METABOLISM; METABOLITES; BIOAVAILABILITY; BIOACCUMULATION Greenblatt, D.J.; Divoll, M.; Abernethy, D.R.; Ochs, H.R.; Shader, R.I. 1983 Drug Metabolism Reviews 14(2):251-292				

4H-s-Triazolo(4,3-a)(1,4)benzodiazepine, 8-chloro-1-methyl-6-phenyl- (8 CI); 4H-(1,2,4)Triazolo(4,3-a)(1,4)benzodiazepine, 8-chloro-1-methyl-6-phenyl- (9 CI)
28981-97-7
C17-H13-Cl-N4

Tissue	Cases Exposure Route	Range	Mean	General Information
11488 Blood, serum	a) 8 b) 2 Injection	a) 70.8-12.8 ng/ml b) 5.1-0.82 ng/ml	a) Not applicable b) Not applicable	a) 10 min-24 hr after 4 mg, IV b) 10 min-24 hr after 0.25 mg, IV Ranges of mean. Peaks, 10 min after dose. Estimated from graph. Subjects fasted 9 hr prior to and 6 hr after dose. Healthy volunteers, 21-35 yr, within 15% normal body wt LC
BLOOD SERUM; DELIBERATE EXPOSURE; ANTIDEPRESSIVE AGENTS; MEASUREMENT METHODS; BIOLOGICAL MONITORING; DRUGS; DRUG THERAPY Adams, W.J.; Bombardt, P.A.; Brewer, J.E. 1984 Analytical Chemistry 56:1800-1804				

Tissue	Cases Exposure Route	Range	Mean	General Information
11454 Blood, serum	a) 17 b) 17 Ingestion	a) Not given b) Not given	a) 17.3+/-5.1 ng/ml b) 18.4+/-7.2 ng/ml	a) Alcoholic cirrhosis patients 3.34+/-2.44 hr after 1 g b) Controls 1.67+/-1.42 hr after 1 g. 20-60 yr olds with alcoholic cirrhosis and 24-71 yr old normal controls GC-EC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; LIVER DISEASES; DRUGS; TRANQUILIZERS Juhl, R.P.; Van Thiel, D.H.; Dittert, L.W.; Smith, R.B. 1984 Journal of Clinical Pharmacology 24:113-119				

Tissue	Cases Exposure Route	Range	Mean	General Information
11455 Blood, serum	6 Ingestion	a) Not given b) Not given	a) 15.9+/-1.3 ng/ml b) 12.5+/-1.6 ng/ml S.E.	a) Peak, 1.6+/-0.2 hr, control b) Peak, 2.4+/-0.5 hr, with 80 mg 3X/d propranolol 1 mg oral dose. Peak lower and later with propranolol. Healthy adults, 18-28 yr GC-EC
BLOOD SERUM; DELIBERATE EXPOSURE; ADOLESCENTS; ADULTS; DRUGS; DRUG INTERACTION; BENZODIAZEPINES; ANTIHYPERTENSIVE AGENTS; BETA BLOCKER; COMPARATIVE EVALUATIONS; DIAZEPAMS; METABOLITES Ochs, H.R.; Greenblatt, D.J.; Verburg-Ochs, B. 1984 Clinical Pharmacology and Therapeutics 36(4):451-455				

Tissue	Cases Exposure Route	Range	Mean	General Information
11456 Blood, serum	6 Ingestion	26.4-58.1 ng/L	Not given	Steady-state levels during treatment with 1.5-6 mg/d New assay method. Representative chromatograms shown. No accumulation of metabolites found. Patients undergoing long-term alprazolam therapy HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; DEPRESSION; ANTIDEPRESSIVE AGENTS; DRUGS; TRANQUILIZERS; MEASUREMENT METHODS; METABOLITES McCormick, S.R.; Nielsen, J.; Jatlow, P. 1984 Clinical Chemistry 30(10):1652-1655				

4H-s-Triazolo(4,3-a)(1,4)benzodiazepine, 8-chloro-6-(o-chlorophenyl)-1-methyl- (8 CI); 4H-(1,2,4)Triazolo(4,3-a)(1,4)benzodiazepine, 8-chloro-6-(2-chlorophenyl)-1-methyl- (9 CI)
28911-01-5
C17-H13-Cl2-N4
MW 343.2

Tissue	Cases Exposure Route	Range	Mean	General Information
11457 Blood	1 Ingestion	Not applicable	6.7 ng/mL	Postmortem measurement. Victim drowned while in advanced stage of intoxication after having also taken 30 aspirin and 11 Halcion tablets. Level within therapeutic range. 70 yr old male suicide victim, NZ HPLC
DRUGS; DELIBERATE EXPOSURE; HYPNOTICS; SUICIDE; ALCOHOLS; NEW ZEALAND; BLOOD Wong, R.J. 1984 Journal of Analytical Toxicology 8:10-13				

Tissue	Cases Exposure Route	Range	Mean	General Information
11458 Blood, plasma	12 Ingestion	4.1+/-2.6 ng/ml	Not applicable	Peak, 1.1+/-0.5 hr after 0.5 mg. Healthy volunteers GC
BLOOD PLASMA; DELIBERATE EXPOSURE; NETHERLANDS; ADULTS; DRUG THERAPY; DRUGS; HYPNOTICS; TRANQUILIZERS; DIAZEPAMS; BIOACCUMULATION; BENZODIAZEPINES Jochemsen, R.; van Boxtel, C.J.; Hermans, J.; Breimer, D.D. 1983 Clinical Pharmacology and Therapeutics 34(1):42-47				

Tissue	Cases Exposure Route	Range	Mean	General Information
11459 Blood, plasma	20 Ingestion	a) Not given b) Not given c) 4.25-0.04 ng/ml d) 5.20-0.42 ng/ml	a) 5.3+/-1.0 ng/ml b) 5.6+/-2.8 ng/ml c) Not given d) Not given	a) Peaks, at 2.1+/-1.2 hr, controls b) Peaks at 1.5+/-0.9 hr, oral contraceptive users c) At 0.5 and 12 hr, controls, range of means d) At 1.5 and 12 hr, oral contraceptive users, range of means After single 0.5 mg dose. c) and d) estimated from graph. Healthy adult volunteers, 19.6-22.2 yr, 52.1-68.9 kg GC-EC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; BENZODIAZEPINES; DRUG INTERACTION; HYPNOTICS; METABOLISM; DRUGS Stoehr, G.P.; Kroboth, P.D.; Juhl, R.P.; Wender, D.B.; Phillips, J.P.; Smith, R.B. 1984 Clinical Pharmacology and Therapeutics 36(5):683-690				

4H-s-Triazolo(4,3-a)(1,4)benzodiazepine, 8-chloro-6-(o-chlorophenyl)-1-methyl- (8 CI); 4H-(1,2,4)Triazolo(4,3-a)(1,4)benzodiazepine, 8-chloro-6-(2-chlorophenyl)-1-methyl- (9 CI)
28911-01-5
C17-H12-Cl2-N4
MW 343.2

Tissue	Cases Exposure Route	Range	Mean	General Information
11460 Blood, plasma	a) 5 b) 5 c) 5 d) 5 e) 5 f) 5 Ingestion	a) 5.2-7.6 ng/ml b) 4.1-7.0 ng/ml c) 3.5-9.3 ng/ml d) 3.5-7.8 ng/ml e) 3.7-8.2 ng/ml f) 5.4-11.2 ng/ml	a) 6.4 ng/ml b) 6.1 ng/ml c) 5.9 ng/ml d) 5.2 ng/ml e) 6.0 ng/ml f) 7.7 ng/ml	a) Young men, peak at 1.05 hr b) Young women, peak at 1.85 hr c) Middle-aged men, peak at 0.75 hr d) Middle-aged women, peak at 1.6 hr e) Elderly men, peak at 0.75 hr f) Elderly women, peak at 0.65 hr 0.5 mg oral dose. Healthy volunteers, 15 males, 15 females, 20-76 yr old GC-EC

BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; BEHAVIOR DISORDERS; HYPNOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; BENZODIAZEPINES; AGE; SEX
Smith, R.B.; Divoll, M.; Gillespie, W.R.; Greenblatt, D.J. 1983 Journal of Clinical Physchopharmacy 3(3):172-176

Tissue	Cases Exposure Route	Range	Mean	General Information
11461 Blood, plasma	6 Ingestion	2.3-8.7 ng/ml	3.0+/-0.50 ng/ml	Range of peaks at 0.95+/-0.30 hr after 0.25 mg. Levels correlated with the results of psychological tests. Volunteer graduate medical students, 3 males, 3 females, 21-26 yr old, wt 48-74 kg GC-EC

BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; SWITZERLAND; HYPNOTICS; DRUG THERAPY; DRUGS; BEHAVIOR DISORDERS; SEDATIVES; BIOACCUMULATION
Bakir, G.; Fisch, H.U.; Huguenin, P.; Bircher, J. 1983 Clinical Pharmacology and Therapeutics 34(2):195-201

Tissue	Cases Exposure Route	Range	Mean	General Information
11462 Blood, plasma				Review. Pharmacokinetic properties and metabolism of benzodiazepines, relating differences among drugs to differences in clinical action. Use as marker compounds for evaluation of changes in metabolising capacity in old age discussed.

BLOOD PLASMA; DELIBERATE EXPOSURE; AGE; ADULTS; DRUGS; BENZODIAZEPINES; REVIEW; DIAZEPAMS; METABOLISM; METABOLITES; BIOAVAILABILITY; BIOACCUMULATION
Greenblatt, D.J.; Divoll, M.; Abernethy, D.R.; Ochs, H.R.; Shader, R.I. 1983 Drug Metabolism Reviews 14(2):251-292

4H-s-Triazolo(4,3-a)(1,4)benzodiazepine, 8-chloro-6-(o-chlorophenyl)-1-methyl- (8 CI); 4H-(1,2,4)Triazolo(4,3-a)(1,4)benzodiazepine, 8-chloro-6-(2-chlorophenyl)-1-methyl- (9 CI)
28911-01-5
C17-H12-Cl2-N4
MW 343.2

Tissue	Cases Exposure Route	Range	Mean	General Information
11468 Liver	1 Ingestion	Not applicable	38 ng/g	Postmortem measurement. Victim drowned while in advanced stage of intoxication after having also taken 30 aspirin and 11 Halcion tablets. Level within therapeutic range. 70 yr old male suicide victim, NZ HPLC
DRUGS; DELIBERATE EXPOSURE; HYPNOTICS; SUICIDE; ALCOHOLS; NEW SEALAND; BLOOD Wong, R.J. 1984 Journal of Analytical Toxicology 8:10-13				

5-beta-Card-20(22)-enolide, 3beta-((2,6-dideoxy-beta-D-ribo-hexopyranosyl)oxy)-14-hydroxy- (8 CI); Card-20(22)-enolide, 3-((2,6-dideoxy-beta-D-ribo-hexopyranosyl)oxy)-14-hydroxy-, (3beta,5beta)- (9 CI)
18404-43-8
C29-H44-O7

Tissue	Cases Exposure Route	Range	Mean	General Information
11464 Blood, serum	1 Injection	100-8 pmol/ml	Not applicable	0-100 hr, rapid decline to 20 pmol/ml by 24 hr after 0.66 mg IV. No difference in renal clearance between normal subjects and patients with renal insufficiency. Patient with renal insufficiency RIA
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; KIDNEY DISEASES; ANTIARRHYTHMIC AGENTS; BIOACCUMULATION; DRUG THERAPY; METABOLITES; DRUGS Graves, P.E.; Fenster, P.E.; MacFarland, R.T.; Marcus, F.I.; Perrier, D. 1984 Clinical Pharmacology and Therapeutics 36(5):607-12				

Tissue	Cases Exposure Route	Range	Mean	General Information
11465 Blood, serum	6 Injection	80-3 pmol/ml	Not applicable	0-100 hr, rapid decline from 80 pmol/ml to 7 pmol/ml in 24 hr, moderate decline thereafter, following 0.66 mg IV. Healthy volunteers, 23-74 yr old RIA
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; ANTIARRHYTHMIC AGENTS; BIOACCUMULATION; DRUG THERAPY; DRUGS; METABOLITES Graves, P.E.; Fenster, P.E.; MacFarland, R.T.; Marcus, F.I.; Perrier, D. 1984 Clinical Pharmacology and Therapeutics 36(5):601-606				

5-Oxa-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-((carboxy(4-hydroxyphenyl)acetyl)amino)-7-methoxy-3-(((1-methyl-1H-tetrasol-5-yl)thio)methyl)-8-oxo-
64952-97-2
C20-H20-N6-O9-S
MW 520.52

Tissue	Cases Exposure Route	Range	Mean	General Information
11466 Amniotic fluid	9	1.56-15 ug/ml	Not given	6 and 2 hr after third dose 2 g IV 2X/d. % ratio to maternal serum >100 beyond 2 hr. Cefoxitin and ceftazidime given concurrently. Women with pregnancies terminated at 19-21 wk gestation Bioassay
BLOOD SERUM; AMNIOTIC FLUID; DELIBERATE EXPOSURE; FETUS; ANTIBIOTICS; DRUGS; TRANSPLACENTAL TRANSFER Giamarellou, H.; Gazis, J.; Petrikkos, G.; Antoniadis, A.; Aravantinos, D.; Daikos, G.K. 1988 American Journal of Obstetrics and Gynecology 157(5):914-918				

Tissue	Cases Exposure Route	Range	Mean	General Information
11467 Blood, plasma	10 Injection	a) 28.6-46.2 ug/ml b) 0.6-5.2 ug/ml	a) Not given b) Not given	a) 1 hr after 1 g IV b) 12 hr Given 1 hr before surgery. No further antibiotics after surgery 26-71 yr olds undergoing surgery for gynecologic cancers, CA
BLOOD PLASMA; UTERUS; OVARIES; LYMPH NODES; OMENTUM; PERITONEAL FLUID; DELIBERATE EXPOSURE; CALIFORNIA; ADULTS; ANTIBIOTICS; SURGERY; NEOPLASMS; DRUGS Rottenmaier, M.A.; Miller, R.D.; Berman, M.L.; DeSaia, P.J. 1984 American Journal of Obstetrics and Gynecology 150(7):882-884				

Tissue	Cases Exposure Route	Range	Mean	General Information
11468 Blood, plasma	8 Injection	128+/-0-28 ug/ml	Not applicable	0-24 hr, rapid decline from 128 to 70 ug/ml in 2 hr, moderate decline thereafter, after 1 g IV. Patients undergoing chronic ambulatory peritoneal dialysis 5-24 mo, 42-70 yr old HPLC
BLOOD PLASMA; URINE; DIALYSIS FLUID; DELIBERATE EXPOSURE; FRANCE; ADULTS; KIDNEY DISEASES; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; HEMODIALYSIS; BIOACCUMULATION Singlas, E.; Boutron, M.F.; Merdjan, H.; Brocard, J.F.; Pocheville, M.; Price, D. 1983 Clinical Pharmacology and Therapeutics 34(5):603-607				

5-Oxa-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-((carboxy(4-hydroxyphenyl)acetyl)amino)-7-methoxy-3-(((1-methyl-1H-tetrazol-5-yl)thio)methyl)-8-oxo-
64952-97-2
C20-H20-N6-O8-S
MW 520.52

Tissue	Cases Exposure Route	Range	Mean	General Information
11469 Blood, plasma	14 Injection	a) 19.2+/-3.6-1.7+/-0.5 ug/ml b) 8.6+/-1.2-2.2+/-0.7 ug/ml c) 51.9+/-14.4-1.5+/-0.7 ug/ml d) 24.4+/-10.5-2.8+/-1.4 ug/ml	a) Not given b) Not given c) Not given d) Not given	a) 0 and 8 hr after 250 mg dose IV b) 1 and 8 hr after 250 mg IM c) 0 and 12 hr after 500 mg IV d) 1 and 12 hr after 500 mg IM Ranges of means. Crossover study. No significant differences found, at a given dose and delivery method, after multiple doses (every 12 hr for 7 doses). Significant differences between IV and IM administration. Drug showed rapid and complete IM absorption. Average plasma clearances lower than in younger subjects. Creatinine clearance can be used as guideline for dosing this population group. 60-74 yr old volunteers, wt 51-106 kg, with normal liver function and creatinine clearance of 60 ml/min or more Bioassay
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; AGE; ANTIBIOTICS; DRUGS; METABOLISM Andritz, M.H.; Smith, R.P.; Baltch, A.L.; Griffin, P.E.; Conroy, J.V.; Sutphen, N.; Hammer, M.C. 1984 Antimicrobial Agents and Chemotherapy 25(1):33-36				

Tissue	Cases Exposure Route	Range	Mean	General Information
11470 Blood, serum	26 Injection	a) 20.5-62 ug/ml b) 0.38-2 ug/ml	a) 37.8+/-15.2 ug/ml b) 1.2+/-0.6 ug/ml	a) 1 hr after third dose b) 8 hr after third dose 2 g IV 3X/d. Cefoxitin and ceftazidime given concurrently. Women with pregnancies terminated at 19-21 wk gestation Bioassay
BLOOD SERUM; AMNIOTIC FLUID; DELIBERATE EXPOSURE; FETUS; ANTIBIOTICS; DRUGS; TRANSPLACENTAL TRANSFER Giamarellou, H.; Gasis, J.; Petrikkos, G.; Antsaklis, A.; Aravantinos, D.; Daikos, G.K. 1983 American Journal of Obstetrics and Gynecology 147(8):914-918				

Tissue	Cases Exposure Route	Range	Mean	General Information
11471 Blood, serum	6 Injection	219.8+/-17.6-5.7+/-2.5 ug/ml	Not applicable	0-12 hr, peak (219.8+/-17.6 ug/ml) at 0 time, immediately after 30 min infusion of 2 mg. Healthy volunteers, 18-35 yr old HPLC
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ADULTS; INFECTION; ANTIBIOTICS; BIOACCUMULATION; DRUGS Drusano, G.L.; Standiford, H.C.; Fitzpatrick, B.; Leslie, J.; Tangtateswasdi, P.; Ryan, P.; Tatem, B.; Moody, M.R.; Schimpff, S.C. 1984 Antimicrobial Agents and Chemotherapy 26(3):385-393				

5-Oxa-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-((carboxy(4-hydroxyphenyl)acetyl)amino)-7-methoxy-3-(((1-methyl-1H-tetrazol-5-yl)thio)methyl)-8-oxo-
64952-07-2
C20-H20-N6-O9-S
MW 520.52

Tissue	Cases Exposure Route	Range	Mean	General Information
11472 Dialysis fluid	8 Injection	a) 7.5-85.5% b) 10.2-80.5 ug/ml	a) 17.4+/-3.1% b) 22.7 ug/ml	a) % dose excreted in 24 hr after 1 g IV b) Mean concentration in 2 l dialysis bag after 1 g IV. Patients undergoing chronic ambulatory peritoneal dialysis 5-24 mo, 42-70 yr old HPLC
BLOOD PLASMA; URINE; DIALYSIS FLUID; DELIBERATE EXPOSURE; FRANCE; ADULTS; KIDNEY DISEASES; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; HEMODIALYSIS; BIOACCUMULATION Singlas, E.; Boutron, M.F.; Merdjan, H.; Brocard, J.F.; Pocheville, M.; Pries, D. 1983 Clinical Pharmacology and Therapeutics 34(3):403-407				

Tissue	Cases Exposure Route	Range	Mean	General Information
11473 Lymph node	8 Injection	0-5.8 ug/gm	Not given	90-305 min after 1 gm IV <1 hr before surgery 26-71 yr olds undergoing surgery for gynecologic cancers, CA
BLOOD PLASMA; UTERUS; OVARIES; LYMPH NODES; OMENTUM; PERITONEAL FLUID; DELIBERATE EXPOSURE; CALIFORNIA; ADULTS; ANTIBIOTICS; SURGERY; NEOPLASMS; DRUGS Rettenmaier, M.A.; Miller, R.D.; Berman, M.L.; DeSaia, P.J. 1984 American Journal of Obstetrics and Gynecology 150(7):882-884				

Tissue	Cases Exposure Route	Range	Mean	General Information
11474 Milk	8 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 1.56+/-1.06 mg/ml b) 2.66+/-2.4 mg/ml c) 3.37+/-1.90 mg/ml d) 3.24+/-1.7 mg/ml	a) Day 1 b) Day 2 c) Day 3 d) Day 4 Dose, 2 gm every 8 hr. Estimated amount consumed by neonate, 0.66-2.01 mg/d. Authors advise against breastfeeding because of possible suppression of gram-negative organisms in gut. Mothers with puerperal infections, CA HPLC
MILK; CALIFORNIA; DELIBERATE EXPOSURE; ADULTS; INFECTION; ANTIBIOTICS; LACTATION Miller, R.D.; Keegan, K.A.; Thrupp, L.D.; Brann, J. 1984 American Journal of Obstetrics and Gynecology 148(3):348-349				

Tissue	Cases Exposure Route	Range	Mean	General Information
11475 Omentum	2 Injection	Not given	2.5 ug/gm	70-150 min after 1 gm IV <1 hr before surgery 26-71 yr olds undergoing surgery for gynecologic cancers, CA
11476 Ovary	10 Injection	0.0-12.2 ug/gm	Not given	105 min after 1 gm IV <1 hr before surgery 26-71 yr olds undergoing surgery for gynecologic cancers, CA

(next page)

5-Oxa-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-((carboxy(4-hydroxyphenyl)acetyl)amino)-7-methoxy-3-(((1-methyl-1H-tetrasol-5-yl)thio)methyl)-8-oxo-
64952-07-2
C20-H20-N6-O8-S
MW 520.52

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
11477 Peritoneal fluid	6 Injection	2.0-5.0 ug/gm	Not given	80-106 min after 1 gm IV <1 hr before surgery 26-71 yr olds undergoing surgery for gynecologic cancers, CA
BLOOD PLASMA; UTERUS; OVARIES; LYMPH NODES; OMENTUM; PERITONEAL FLUID; DELIBERATE EXPOSURE; CALIFORNIA; ADULTS; ANTIBIOTICS; SURGERY; NEOPLASMS; DRUGS Rettenmaier, M.A.; Miller, R.D.; Berman, M.L.; DeSaia, P.J. 1984 American Journal of Obstetrics and Gynecology 150(7):882-884				

Tissue	Cases Exposure Route	Range	Mean	General Information
11478 Urine	10 Injection	a) 836+/-416-16+/-11 ug/ml b) 1081+/-842-16+/-9 ug/ml c) 460+/-414-20+/-12 ug/ml d) 869+/-480-20+/-11 ug/ml	a) Not given b) Not given c) Not given d) Not given	a) During 0-1 and 12-24 hr collection intervals after 250 mg dose IV. 50.8+/-25% of dose excreted over 24 hr b) During 0-1 and 12-24 hr after 500 mg dose IV. 67.6+/-8.5% excreted over 24 hr c) During 1-3 and 12-24 hr after 250 mg IM. 55.7+/-18.2% excreted over 24 hr d) During 1-3 and 12-24 hr after 500 mg IM. 73.4+/-6.8% excreted over 24 hr Ranges of means. Amount excreted by each subject in 24 hr was 95+/-10% of estimated unchanged drug which would ultimately be excreted based on renal clearance/plasma clearance for that subject. Smaller renal clearances than in younger subjects. 60-74 yr old volunteers, wt 51-108 kg, with normal liver function and creatinine clearance of 60 ml/min or more Bioassay
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; AGE; ANTIBIOTICS; DRUGS; METABOLISM Andrita, M.H.; Smith, R.P.; Baltch, A.L.; Griffin, P.E.; Conroy, J.V.; Sutphen, N.; Hammer, M.C. 1984 Antimicrobial Agents and Chemotherapy 25(1):33-36				

Tissue	Cases Exposure Route	Range	Mean	General Information
11479 Urine	6 Injection	6202-60 ug/ml	Not applicable	2-24 hr, peak (6202 ug/ml) at 2 hr following 30 min infusion of 2 mg. Healthy volunteers, 18-35 yr old HPLC
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ADULTS; INFECTION; ANTIBIOTICS; BIOACCUMULATION; DRUGS Drusano, G.L.; Standiford, H.C.; Fitzpatrick, B.; Leslie, J.; Tangtateswasdi, P.; Ryan, P.; Tatem, B.; Moody, M.R.; Schimpff, S.C. 1984 Antimicrobial Agents and Chemotherapy 26(3):388-393				

5-Oxa-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-((carboxy(4-hydroxyphenyl)acetyl)amino)-7-methoxy-3-(((1-methyl-1H-tetrasol-5-yl)thio)methyl)-8-oxo-
64952-97-2
C20-H20-N6-O8-S
MW 520.52

Tissue	Cases Exposure Route	Range	Mean	General Information
11480 Urine	8 Injection	0.5-44.5%	14.6+/-5.7%	% dose excreted in 24 hr after 1 g IV. Patients undergoing chronic ambulatory peritoneal dialysis 5-24 mo, 42-70 yr old HPLC
BLOOD PLASMA; URINE; DIALYSIS FLUID; DELIBERATE EXPOSURE; FRANCE; ADULTS; KIDNEY DISEASES; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; HEMODIALYSIS; BIOACCUMULATION Singlas, E.; Boutron, M.P.; Merdjan, H.; Brocard, J.P.; Pocheville, M.; Fries, D. 1983 Clinical Pharmacology and Therapeutics 34(5):403-407				

Tissue	Cases Exposure Route	Range	Mean	General Information
11481 Uterus	10 Injection	a) Not given b) Not given c) Not given d) Not given	a) 18.7 ug/gm b) 4.2 ug/gm c) 6.1 ug/gm d) 2.5 ug/gm	a) 70 min after 1 g IV b) 195 min c) Cervix, 70 min after 1 gm IV d) Cervix, 195 min Given <1 hr before surgery 26-71 yr olds undergoing surgery for gynecologic cancers, CA
11482 Vagina	2 Injection	6.8-7.6 ug/gm	Not given	150-180 min after 1 gm IV <1 hr before surgery 26-71 yr olds undergoing surgery for gynecologic cancers, CA
BLOOD PLASMA; UTERUS; OVARIES; LYMPH NODES; OMENTUM; PERITONEAL FLUID; DELIBERATE EXPOSURE; CALIFORNIA; ADULTS; ANTIBIOTICS; SURGERY; NEOPLASMS; DRUGS Rettenmaier, M.A.; Miller, R.D.; Berman, M.L.; DeSalo, P.J. 1984 American Journal of Obstetrics and Gynecology 150(7):882-884				

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 3-(((aminocarbonyl)oxy)methyl)-7-((2-furanyl(methoxyimino)acetyl)amino) 8-oxo, (6R-(6alpha,7beta(Z)))-
56268-75-2
C16-H16-N4-O6-S
MW 424.43

Tissue	Cases Exposure Route	Range	Mean	General Information
11488 Blood, serum	5 Injection	a) 80.8-101.0 ug/ml b) 65.7-125.0 ug/ml c) 0.2-0.7 ug/ml d) 15.1-28.6 ug/ml	a) Not given b) Not given c) Not given d) Not given	a) Peak after 750 mg b.i.d. IV for 6 d, 2 cases b) Peak after 750 mg/d IV for 7 d, 3 cases c) Trough after 750 mg b.i.d. IV for 6 d, 2 cases d) Trough after 750 mg/d IV for 7 d, 3 cases Patients with severe renal insufficiency. Patients, 3 females, 2 males, 52-73 yr old, wt 60.3-85.1 kg HPLC
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; NORWAY; ADULTS; KIDNEY DISEASES; INFECTION; ANTIBIOTICS; DRUG THERAPY; DRUG INTERACTION; DRUGS; BIOACCUMULATION Walstad, R.A.; Nilsen, O.G.; Berg, K.J. 1983 European Journal of Clinical Pharmacology 24:301-306				

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 3-(((aminocarbonyl)oxy)methyl)-7-((2-furanyl(methoxyimino)acetyl)amino) 8-oxo, (6R-(6alpha,7beta(Z)))-
55268-75-2
C16-H16-N4-O8-S
MW 424.42

Tissue	Cases Exposure Route	Range	Mean	General Information
11484 Blood, serum	8 Ingestion	a) 2.5-1 mg/l b) 8.7-1 mg/l	a) Not applicable b) Not applicable	a) First dose. Peak 8.6 mg/l (4.5-12.8) at 2.4 hr (1.5-3.0) b) 21st dose. Peak 9.0 mg/l (2.5-15.0) at 1.6 hr (1.0-3.0) 30 min and 8 hr after 500 mg dose. Dosing regimen: 2X/d on d 1, 3X/d on d 2-7, 1X/d on d 8. Doses after meals, approximately 6 hr apart. Estimated from graph. Healthy volunteers Fluid stools HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; ANTIBIOTICS; DRUGS Sommers, D.K.; Wyk, M.V.; Williams, P.E.O.; Harding, S.M. 1984 Antimicrobial Agents and Chemotherapy 25(3):344-347				

Tissue	Cases Exposure Route	Range	Mean	General Information
11485 Cerebrospinal fluid	25 Injection	a) 4.8-9.3 ug/ml b) 0.94-7 ug/ml c) 0.22-1.75 ug/ml	a) 6.4+/-1.7 ug/ml b) 3.6+/-2.2 ug/ml c) 1.34+/-1.3 ug/ml	a) Day 2 with either 200 or 260 mg/kg/d IV in 4 divided doses. 9 meningitis patients b) Day 14, 6 patients c) 2 hr after 50 mg/kg IV. 10 patients without meningitis. 25 d-12 yr olds with and without meningitis Agar-diffusion
BLOOD SERUM; CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; INFANTS; CHILDREN; NERVOUS SYSTEM DISEASES; INFECTION; ANTIBIOTICS; DRUGS Sirinavin, S.; Chiemchanya, S.; Visudhipan, P.; Lolekha, S. 1984 Antimicrobial Agents and Chemotherapy 25(2):273-275				

Tissue	Cases Exposure Route	Range	Mean	General Information
11486 Urine	101 Ingestion	a) 30.0-42.9% b) 24.6-50.2% c) Not given d) Not given e) Not given f) Not given % of dose	a) 36.1% b) 36.5% c) 32.5+/-1.8% d) 36.4+/-2.1% e) 33.8+/-1.6% f) 35.0+/-2.1% % of dose S.E.	a) First dose, 500 mg cefuroxime: 8 cases b) 21st dose c) First dose, 500 mg cefuroxime and 400 mg pivmecillinam. 46 cases d) 21st dose e) First dose, 500 mg cefuroxime and 500 mg pivampicillin: 47 cases f) 21st dose Mean recoveries, 0-8 hr after dose. Dosing regimen: 2X/d on d 1, 3X/d on d 2-7 1X/d on d 8. Doses after meals, approximately 6 hr apart. Healthy volunteers HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; ANTIBIOTICS; DRUGS Sommers, D.K.; Wyk, M.V.; Williams, P.E.O.; Harding, S.M. 1984 Antimicrobial Agents and Chemotherapy 25(3):344-347				

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 3-(((aminocarbonyl)oxy)methyl)-7-((2-furanyl(methoxyimino)acetyl)amino) 8-oxo, (6R-(6alpha,7beta(Z)))-
55268-75-2
C16-H16-N4-O8-S
MW 424.42

Tissue	Cases Exposure Route	Range	Mean	General Information
11687 Urine	5 Injection	a) 79-81% b) 16-50% c) 77-84% d) 17-60%	a) 80% b) 33% c) 80% d) 38%	a) 2 patients with >20 ml/min creatinine clearance, day 2 b) 3 patients with <12 ml/min creatinine clearance, day 2 c) 2 patients with > 20 ml/min creatinine clearance, day 6 d) 3 patients with <12 ml/min creatinine clearance, day 6 or 7 % 750 mg dose excreted in 10 hr. Patients with severe renal insufficiency. Patients, 3 females, 2 males, 52-73 yr old, wt 60.3-83.1 kg HPLC
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; NORWAY; ADULTS; KIDNEY DISEASES; INFECTION; ANTIBIOTICS; DRUG THERAPY; DRUG INTERACTION; DRUGS; BIOACCUMULATION Walstad, R.A.; Nilsen, O.G.; Berg, K.J. 1985 European Journal of Clinical Pharmacology 24:391-398				

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 3-(((aminocarbonyl)oxy)methyl)-7-((2-furanyl(methoxyimino)acetyl)amino)-8-oxo-, 1-(acetyloxy)ethyl ester, (6R-(6alpha,7beta(Z)))-
64544-07-6
C20-H22-N4-O10-S

Tissue	Cases Exposure Route	Range	Mean	General Information
11488 Blood, serum	18 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 2.15 mg/l b) 6.0 mg/l c) 1.0 mg/l d) 0.4 mg/l e) 1.9+/-0.5 mg/l f) 3.8+/-0.4 mg/l g) 2.6+/-0.4 mg/l h) 2.9+/-0.3 mg/l S.E.	a) 40 min after single 250 mg dose after food, 12 cases b) 2 hr c) 5 hr d) 7 hr e) 30 min after 1st of 19 doses, 250 mg every 6 hr for 5 d, fasting, 6 cases f) 120 min after 1st dose g) 30 min after 13th dose h) 120 min after 13th dose Measured as cefuroxime metabolite. a)-d) estimated from graph. Healthy volunteers, 20-48 yr, 48-101 kg Diarrhea Raised eosinophil count, change in stool flora HPLC

(next page)

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 3-(((aminocarbonyl)oxy)methyl)-7-((2-furanyl(methoxyimino)acetyl)amino)-8-oxo-, 1-(acetyloxy)ethyl ester, (6R-(6alpha,7beta(Z)))-
64544-07-6
C20-H22-N4-O10-S

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
11489 Urine	39 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) 16.8-44.4% j) 4.2-29.5% k) 26-39% % of dose	a) 27.7+/-2.3% b) 28.8+/-1.4% c) 25.1+/-2.3% d) 25.3+/-1.2% e) 42.0+/-2.9% f) 37.8+/-1.4% g) 37.3+/-2.3% h) 33.2+/-2.2% i) 37.1+/-2.1% j) 10.2+/-1.9% k) Not given % of dose S.E.	a) 0-6 hr, fasting, 500 mg tablet no. 1, 15 cases b) 0-6 hr, fasting, 500 mg tablet no. 2 c) 0-6 hr, fasting, 500 mg aqueous suspension d) 0-6 hr, fasting, 1 g aqueous suspension e) 0-6 hr, 500 mg tablet no.1 after food f) 0-6 hr, 500 mg tablet no. 2 after food g) 0-6 hr, 500 mg aqueous suspension after food h) 0-6 hr, 1 g aqueous suspension after food i) 0-4 hr, 250 mg after food, 12 cases j) 4-8 hr, 250 mg after food k) 6th hr, 250 mg every 6 hr for 5 d, 12 cases, estimated from graph Compared to ampicillin, recoveries were higher after food, independent of formulation and dosage, and over 5 d variation in recovery was less. Measured as cefuroxime metabolite. Healthy volunteers, 20-48 yr, 48-101 kg Diarrhea HPLC
ANTIBIOTICS; DRUGS; ADULTS; BIOAVAILABILITY; COMPARATIVE EVALUATIONS; DELIBERATE EXPOSURE; URINE; BLOOD SERUM; METABOLITES Harding, S.M.; Williams, P.E.O.; Ayrton, J. 1984 Antimicrobial Agents and Chemotherapy 25(1):78-82				

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 3-(((aminocarbonyl)oxy)methyl)-7-methoxy-8-oxo-7-((2-thienylacetyl)amino)-, (6R-cis)-
55607-66-0
C16-H17-N3-O7-S2
MW 427.46, MP 149-150 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
11490 Amniotic fluid	9	2.3-6.7 ug/ml	Not given	1 and 5 hr after third dose 2 g IV 3X/d. % ratio to maternal serum >100 beyond 3 hr. Ceftazidime and moxalactam given concurrently. Women with pregnancies terminated at 19-21 wk gestation Bioassay
11491 Blood, serum	26 Injection	a) 15.4-31 ug/ml b) 0.4-1.1 ug/ml	a) 26.7+/-4.9 ug/ml b) 0.6+/-0.3 ug/ml	a) 1 hr after third dose b) 4 hr after third dose 2 g IV 3X/d. Undetectable at 6 hr. Ceftazidime and moxalactam given concurrently. Women with pregnancies terminated at 19-21 wk gestation Bioassay
BLOOD SERUM; AMNIOTIC FLUID; DELIBERATE EXPOSURE; FETUS; ANTIBIOTICS; DRUGS; TRANSPLACENTAL TRANSFER Giamarellou, H.; Gazis, J.; Petrikkos, G.; Antsaklis, A.; Aravantinos, D.; Daikos, G.K. 1985 American Journal of Obstetrics and Gynecology 147(8):914-918				

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 3-(((aminocarbonyl)oxy)methyl)-7-methoxy-8-oxo-7-((2-thienylacetyl)amino)-, (6R-cis)-
35607-66-0
C16-H17-N3-O7-S2
MW 427.46, MP 149-150 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
11492 Blood, serum	a) 18 b) 5 Injection	a) 58.3+/-18.6-1.54+/-1.17 ug/ml b) 50.8+/-25.2-3.35+/-2.87 ug/ml	a) Not given b) Not given	a) Normotensive postpartum cesarean delivery patients b) Pregnancy-induced hypertensive postpartum cesarean delivery patients Peaks and troughs. Significant difference, troughs, $p < 0.05$. Troughs below minimal inhibitory concentration for several bacteria. Half-life longer in hypertensives. HPLC
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; HYPERTENSION; ANTIBIOTICS; DRUGS; DRUG THERAPY; PREGNANCY				
Gonik, B.; Cotton, D.; Feldman, S.; Cleary, T.G.; Pickering, L.K. 1984 American Journal of Obstetrics and Gynecology 148(8):1088-1091				

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 3-(((5-methyl-1,3,4,-thiadiasol-2-yl)thio)methyl)-8-oxo-7-(2-(1H-tetrasol-1-yl)a cetamido)- (8 CI) 5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 3-(((5-methyl-1,3,4-thiadiasol-2-yl)thio)methyl)-8-oxo-7-((1H-tetrasol-1-ylacety l)amino)-, (6R-trans)- (9 CI)
25953-19-9
C14-H14-N8-O4-S3
MW 454.5, MP 198-200 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11493 Blood, plasma	17 Injection	a) 72-8 ug/ml b) 35-7 ug/ml	a) Not given b) Not given	a) 0 and 72 hr after 10 mg/kg IV for 2 min b) 5 and 72 hr after 10 mg/kg IP for 4 hr. Initially 11 ug/ml at 1 hr Estimated from graph 53.4+/-17 yr olds treated with continuous ambulatory peritoneal dialysis for 8.4+/-4.6 mo Microbiological
ADULTS; KIDNEY DISEASES; BLOOD PLASMA; ANTIBIOTICS; COMPARATIVE EVALUATIONS; DRUGS				
Bunke, C.M.; Aronoff, G.R.; Brier, M.E.; Sloan, R.S.; Luft, F.C. 1983 Clinical Pharmacology and Therapeutics 33(1):66-72				

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-(((((4-ethyl-2,3-dioxo-1-piperazinyl)carbonyl)amino)(4-hydroxyphenyl)acetyl)am ino)-3-(((1-methyl-1H-tetrasol-5-yl)thio)methyl)-8-oxo-, (6R-(6alpha,7beta(R*)))-
62893-19-0
C35-H27-N9-O8-S3

Tissue	Cases Exposure Route	Range	Mean	General Information
11494 Ascites fluid				Review. Normal subjects and patients with hepatic and renal dysfunction. Information on levels with different dosages, routes, and other pharmacokinetic data.
11495 Bile				Review. Normal subjects and patients with hepatic and renal dysfunction. Information on levels with different dosages, routes, and other pharmacokinetic data.

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5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-(((((4-ethyl-2,3-dioxo-1-piperazinyl)carbonyl)amino)(4-hydroxyphenyl)acetyl)amino)-3-(((1-methyl-1H-tetrazol-5-yl)thio)methyl)-8-oxo-, (6R-(6alpha,7beta(R*)))-

62893-19-0

C25-H27-N9-O8-S2

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
11496 Blood, serum				Review. Normal subjects and patients with hepatic and renal dysfunction. Information on levels with different dosages, routes, and other pharmacokinetic data.

BLOOD SERUM; URINE; SPUTUM; TONSILS; SINUS MUCOSA; NASAL MUCOSA; PELVIC TISSUE; ASCITES FLUID; CEREBROSPINAL FLUID; BILE; DELIBERATE EXPOSURE; INFECTION; ANTIBIOTICS; DRUG THERAPY; DRUGS; REVIEW; METABOLISM

Greenfield, R.A.; Gerber, A.U.; Craig, W.A. 1983 Review of Infectious Diseases 5(supplement):S127-S135

Tissue	Cases Exposure Route	Range	Mean	General Information
11497 Blood, serum	14 Injection	a) 124+/-35-14+/-13 ug/ml b) 149+/-13-12+/-5 ug/ml c) 85+/-25-7+/-1 ug/ml d) 112+/-30-9+/-5 ug/ml e) 162+/-25-18+/-12 ug/ml f) 112+/-14-9+/-7 ug/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) 5 cases, full-term, first or second day b) Fifth thru seventh day c) 5 cases, 35-36 wk, first or second day d) Fifth thru seventh day e) 4 cases, <33 wk, first or second day f) Fifth thru seventh day 5 mg/kg IV administered on day after birth indicated. All specimens 0.5-24 hr, immediate peaks following infusion. Full-term and premature neonates with documented or suspected sepsis HPLC

BLOOD SERUM; CEREBROSPINAL FLUID; URINE; DELIBERATE EXPOSURE; NEWBORN; PREMATURE INFANTS; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; NERVOUS SYSTEM DISEASES

Rosenfeld, W.N.; Evans, H.E.; Batheja, R.; Jhaveri, R.C.; Vohra, K.; Khan, A.J. 1983 Antimicrobial Agents and Chemotherapy 23(6):866-869

Tissue	Cases Exposure Route	Range	Mean	General Information
11498 Blood, serum	15 Injection	a) 224.0-386.2 mcg/ml b) 12.0-49.8 mcg/ml c) 260-60 mcg/ml d) 250-175 mcg/ml e) 320-250 mcg/ml f) 250-35 mcg/ml g) 300-220 mcg/ml h) 300-100 mcg/ml	a) 282+/-58.3 mcg/ml b) 28.4+/-12.8 mcg/ml c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) Peak after single 30 mg/kg IV dose, normal patients, 10 cases b) 4 hr after dose c) 10 min and 10 hr, 1 case d) 10 min and 4 hr, before peritoneal dialysis, 1 case e) 10 min and 6 hr after dose, same case during peritoneal dialysis f) 10 min and 12 hr, 1 case g) 10 min and 4 hr, 1 case h) 10 min and 9 hr, 1 case c) -h) 2 g/12 hr IV, critically ill patients with intra-abdominal sepsis and abnormal renal and/or hepatic function. Cerebrospinal fluid levels, normal patients <1.0 mcg/ml (detection limit). Hospital patients, 30-79 yr old HPLC

BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY

Owens, N.J.; French, M.A.; Nightingale, C.H.; Klimek, J.J.; Moskovitz, B.; Quintiliani, R. 1983 Current Therapeutic Research 33(3):513-523

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-((((((4-ethyl-2,3-dioxo-1-piperazinyl)carbonyl)amino)(4-hydroxyphenyl)acetyl)am ino)-3-(((1-methyl-1H-tetrazol-5-yl)thio)methyl)-8-oxo-, (6R-(6alpha,7beta(R*)))-

62893-19-0

C36-H27-N9-O8-S3

Tissue	Cases Exposure Route	Range	Mean	General Information
11499 Cerebrospinal fluid				Review. Normal subjects and patients with hepatic and renal dysfunction. Information on levels with different dosages, routes, and other pharmacokinetic data.
BLOOD SERUM; URINE; SPUTUM; TONSILS; SINUS MUCOSA; NASAL MUCOSA; PELVIC TISSUE; ASCITES FLUID; CEREBROSPINAL FLUID; BILE; DELIBERATE EXPOSURE; INFECTION; ANTIBIOTICS; DRUG THERAPY; DRUGS; REVIEW; METABOLISM Greenfield, R.A.; Gerber, A.U.; Craig, W.A. 1988 Review of Infectious Diseases 5(supplement):S127-S135				

Tissue	Cases Exposure Route	Range	Mean	General Information
11500 Cerebrospinal fluid	7 Injection	1-9.5 ug/ml	5.3 ug/ml	1-18 hr after 50 mg/kg. 4 of 7 infants had documented meningitis, also had highest levels. Full-term and premature neonates with documented or suspected sepsis HPLC
BLOOD SERUM; CEREBROSPINAL FLUID; URINE; DELIBERATE EXPOSURE; NEWBORN; PREMATURE INFANTS; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; NERVOUS SYSTEM DISEASES Rosenfeld, W.N.; Evans, H.E.; Batheja, R.; Jhaveri, R.C.; Vohra, K.; Khan, A.J. 1988 Antimicrobial Agents and Chemotherapy 23(6):866-869				

Tissue	Cases Exposure Route	Range	Mean	General Information
11501 Nasal mucosa				Review. Normal subjects and patients with hepatic and renal dysfunction. Information on levels with different dosages, routes, and other pharmacokinetic data.
11502 Pelvic tissue				Review. Normal subjects and patients with hepatic and renal dysfunction. Information on levels with different dosages, routes, and other pharmacokinetic data.
11503 Sinus mucosa				Review. Normal subjects and patients with hepatic and renal dysfunction. Information on levels with different dosages, routes, and other pharmacokinetic data.
11504 Sputum				Review. Normal subjects and patients with hepatic and renal dysfunction. Information on levels with different dosages, routes, and other pharmacokinetic data.
11505 Tonsil				Review. Normal subjects and patients with hepatic and renal dysfunction. Information on levels with different dosages, routes, and other pharmacokinetic data.

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5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-(((((4-ethyl-2,3-dioxo-1-piperazinyl)carbonyl)amino)(4-hydroxyphenyl)acetyl)am ino)-3-(((1-methyl-1H-tetrasol-5-yl)thio)methyl)-8-oxo-, (6R-(6alpha,7beta(R*)))-
62893-19-0
C25-H27-N9-O6-S3

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
11506 Urine				Review. Normal subjects and patients with hepatic and renal dysfunction. Information on levels with different dosages, routes, and other pharmacokinetic data.
BLOOD SERUM; URINE; SPUTUM; TONSILS; SINUS MUCOSA; NASAL MUCOSA; PELVIC TISSUE; ASCITES FLUID; CEREBROSPINAL FLUID; BILE; DELIBERATE EXPOSURE; INFECTION; ANTIBIOTICS; DRUG THERAPY; DRUGS; REVIEW; METABOLISM Greenfield, R.A.; Gerber, A.U.; Craig, W.A. 1983 Review of Infectious Diseases 5(supplement):S127-S135				

Tissue	Cases Exposure Route	Range	Mean	General Information
11507 Urine	25 Injection	a) 28-93% b) 27-55% c) 24-41% d) 33-68% e) 15-32% f) 7-35%	a) 55% b) 37% c) 34% d) 55% e) 27% f) 18%	a) <33 wk old, first or second day, 5 cases b) Full-term, first or second day, 11 cases c) 33-36 wk old, first or second day, 9 cases d) <33 wk old, fifth thru seventh day, 5 cases e) Full-term, fifth thru seventh day, 11 cases f) 33-36 wk old, fifth thru seventh day, 9 cases % dose recovered in 24 hr after 50 mg/kg on day after birth indicated. Full-term and premature neonates with documented or suspected sepsis HPLC
BLOOD SERUM; CEREBROSPINAL FLUID; URINE; DELIBERATE EXPOSURE; NEWBORN; PREMATURE INFANTS; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION; NERVOUS SYSTEM DISEASES Rosenfeld, W.N.; Evans, H.E.; Batheja, R.; Jhaveri, R.C.; Vohra, K.; Khan, A.J. 1983 Antimicrobial Agents and Chemotherapy 23(6):866-869				

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-(((((4-hydroxy-6-methyl-3-pyridinyl)carbonyl)amino)(4-hydroxyphenyl)acetyl)ami no)-3-(((1-methyl-1H-tetrasol-5-yl)thio)methyl)-8-oxo-, (6R-(6alpha,7beta(R*)))-
70797-11-4
C25-H24-N8-O7-S2

Tissue	Cases Exposure Route	Range	Mean	General Information
11508 Blood, plasma	21 Injection	a) 272-8.2 ug/ml b) 145-2.9 ug/ml c) Not applicable d) Not applicable e) Not applicable	a) Not applicable b) Not applicable c) 108 ug/ml d) 126 ug/l e) 121 ug/ml	a) 5 min and 24 hr after single IV dose of 1000 mg b) 5 min and 24 hr after single IV dose of 500 mg c) Observed 2 hr after 1st of several of IV injections of 1000 mg at 12 hr intervals d) After 7th dose e) After 11th dose. Healthy 27-50 (mean 38) yr olds, wt 48-75 (mean 61) kg Agar diffusion

(next page)

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-((((((4-hydroxy-6-methyl-3-pyridinyl)carbonyl)amino)(4-hydroxyphenyl)acetyl)amino)-3-(((1-methyl-1H-tetrazol-5-yl)thio)methyl)-8-oxo-, (6R-(6alpha,7beta(R*)))-
70797-11-4
C25-H24-N8-O7-S2

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
11809 Urine	12 Injection	Not applicable	22.5+/-5.5% % of dose	24 hr recovery after single IV dose of either 500 or 1000 mg. Healthy 27-50 (mean 38) yr olds, wt 48-75 (mean 61) kg Agar diffusion
DELIBERATE EXPOSURE; DRUGS; BLOOD PLASMA; URINE; ANTIBIOTICS				
Nakagawa, K.; Koyama, M.; Matsui, H.; Ikeda, C.; Yano, K.; Nakatsuru, N.; Yoshinaga, K.; Noguchi, T. 1984 Antimicrobial Agents and Chemotherapy 25(2):221-225				

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-((((cyanomethyl)thio)acetyl)amino)-7-methoxy-3-(((1-methyl-1H-tetrazol-5-yl)thio)methyl)-8-oxo-, (6R-cis)-
56796-20-4
C15-H17-N7-O5-S3

Tissue	Cases Exposure Route	Range	Mean	General Information
11510 Blood, plasma	15 Injection	a) 8.31-66.24 ug/ml b) 11.13-168.88 ug/ml	a) 21.40 ug/ml b) 59.3 ug/ml	a) Start of operation, after anesthesia, sampled at 8.67+/-2.38 min post-incision b) End of operation, at 31.67+/-6.42 min 3-5 cm projected incision site infiltrated with 30 mg/kg. Acute appendicitis patients, 14-37 yr of age, wt 47-71 kg HPLC
11511 Muscle	Injection	a) 1004-38,826 ug/g b) 526-6267 ug/g	a) 8,660 ug/g b) 2,033 ug/g	a) Start of operation, after anesthesia, sampled at 8.67+/-2.38 min post-incision b) End of operation, at 31.67+/-6.42 min 3-5 cm projected incision site infiltrated with 30 mg/kg. Acute appendicitis patients, 14-37 yr of age, wt 47-71 kg HPLC
11512 Skin	15 Injection	a) 734-43,341 ug/g b) 565-22,942 ug/g	a) 14,563 ug/g b) 4,486 ug/g	a) Start of operation, after anesthesia, sampled at 8.67+/-2.38 min post-incision b) End of operation, at 31.67+/-6.42 min 3-5 cm projected incision site infiltrated with 30 mg/kg. Acute appendicitis patients, 14-37 yr of age, wt 47-71 kg HPLC
11513 Subcutaneous	15 Injection	a) 1,068-24,747 ug/g b) 82-11,332 ug/g	a) 9,164 ug/g b) 1,760 ug/g	a) Start of operation, after anesthesia, sampled at 8.67+/-2.38 min post-incision b) End of operation, at 31.67+/-6.42 min 3-5 cm projected incision site infiltrated with 30 mg/kg. Acute appendicitis patients, 14-37 yr of age, wt 47-71 kg HPLC
BLOOD PLASMA; SKIN; MUSCLES; DELIBERATE EXPOSURE; ANTIBIOTICS; SURGERY; DRUGS; DRUG THERAPY				
Rodrigues, J.R.B.; Marino, B.L.; Otero, M.J.; Commes, J.R.; Garcia, J.; Rodrigues, J.M.; Lossano, F.; Domingues-Gil, A.; Alonso, A.G. 1984 Antimicrobial Agents and Chemotherapy 26(5):787-788				

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-(((2-(aminomethyl)phenyl)acetyl)amino)-3-(((1-(carboxymethyl)-1-H-tetrasol-5-yl)thio)methyl)-8-oxo-, (6R-trans)-

60925-61-3
C20-H21-N7-O6-S2
MW 519.60

Tissue	Cases Exposure Route	Range	Mean	General Information
11514 Bile	46 Injection	a) 20+/-20-341 ug/ml b) 14+/-6-142+/-41 ug/ml c) 65+/-26-130+/-14 ug/ml d) 6+/-5-8 ug/ml e) 84+/-7-71 ug/ml f) 45-8 ug/ml S.E.	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) Gall baldder bile, 1 and 4 hr after 1 g IV infusion over 10 min. During surgery, no biliary tract disease b) During cholecystectomy. Patent cystic ducts c) Common duct bile, patients in b) d) Gall baldder bile, cholecystectomy patients with obstructed cystic ducts e) Common duct bile, patients in d) f) 1 and 12 hr after 1 g IV infusion. 5-7 d after common bile duct exploration. T-tube bile. 5 cases Ranges of means. Some values estimated from figure. Surgical patients, 46-66 yr old, wt 148-185 lb, V.A. Medical Center, U of KY Medical Center, Lexington, KY Bioassay; HPLC
11515 Blood, plasma	46 Injection	a) 67+/-15-36 ug/ml b) 55+/-5-30+/-8 ug/ml c) 42+/-7-17 ug/ml d) 80-16+/-8 ug/ml S.E.	a) Not given b) Not given c) Not given d) Not given	a) 1 and 4 hr after 1 g IV infusion over 10 min. During surgery, no biliary tract disease b) During cholecystectomy. Patent cystic ducts c) During cholecystectomy. Obstructed cystic ducts d) 1 and 12 hr after 1 g IV infusion. 5-7 d after common bile duct exploration. T-tube draining duct. 5 cases Ranges of means. Surgical patients, 46-66 yr old, wt 148-185 lb, V.A. Medical Center, U of KY Medical Center, Lexington, KY Bioassay; HPLC
11516 Gall bladder	50 Injection	a) 25+/-4-10+/-2 ug/g b) 21+/-3-9 ug/g S.E.	a) Not given b) Not given	a) 1 and 4 hr after 1 g IV infusion over 10 min. During cholecystectomy. Patent cystic ducts b) 1 and 3 hr. Cholecystectomy, with obstructed cystic ducts Ranges of means. Surgical patients, 46-66 yr old, wt 148-185 lb, V.A. Medical Center, U of KY Medical Center, Lexington, KY Bioassay

BLOOD PLASMA; BILE; GALL BLADDER; DELIBERATE EXPOSURE; INFECTION; ANTIBIOTICS; DRUG THERAPY; DRUGS; COMPARATIVE EVALUATIONS; SURGERY

Konady, D.E.; Ram, M.D. 1982 Antimicrobial Agents and Chemotherapy 22(5):706-709

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-(((2-amino-4-thiazolyl)(methoxyimino)(acetyl)amino)-8-oxo-, (6R-(6alpha,7beta(Z)))-
68401-81-0
C19-H19-N5-O5-S2
MW 383.40, MP 227 C (dec)

Tissue	Cases Exposure Route	Range	Mean	General Information
11517 Blood, serum	18 Injection	118.0-5.8 ug/ml	Not given	30 and 245 min after IV dose, 200 mg/kg/d 2 mo-65 yr olds with meningitis Complications may have included vaginal pruritis, nausea & diarrhea, and localized phlebitis. Increases in transaminases and alkaline phosphatase. Eosinophilia and thrombocytosis. Microbiological assay
BLOOD SERUM; CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; INFANTS; CHILDREN; ADULTS; NERVOUS SYSTEM DISEASES; ANTIBIOTICS; DRUGS				
Overturf, G.D.; Cable, D.C.; Forthal, D.N.; Shikuma, C. 1984 Antimicrobial Agents and Chemotherapy 25(2):258-262				

Tissue	Cases Exposure Route	Range	Mean	General Information
11518 Blood, serum	20 Injection	a) 89.6+/-11.7-1.1+/-1.02 ug/ml b) 84.0+/-17.4-1.9+/-1.14 ug/ml c) 61.4+/-16.5-1.8+/-1.6 ug/ml d) 72.3+/-18.0-11.6+/-3.4 ug/ml	a) Not given b) Not given c) Not given d) Not given	a) 0 and 7.5 hr b) 0 and 11.5 hr c) 0 and 47.5 hr d) 0.08 and 47.5 hr. 68.4 ug/ml at 0 hr Ranges of means after 30 min infusion of 1 g. 4 hr hemodialysis at 24 hr postinfusion in d). Subjects ranged in health from normal in a) to having decreasing renal function and other diseases. Healthy and sick 26-64 yr olds Bioassay
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ANTIBIOTICS; DRUGS; METABOLISM				
Kowalsky, S.F.; Echols, R.M.; Venezia, A.R.; Andrews, B.A. 1988 Antimicrobial Agents and Chemotherapy 24(2):151-155				

Tissue	Cases Exposure Route	Range	Mean	General Information
11519 Blood, serum	8 Injection Dialysis	a) 20-15 mg/l b) 54-29 mg/l c) 2.5-16 mg/l	a) Not applicable b) Not applicable c) Not applicable	a) 15 min-6 hr, peak (20 mg/l) immediately after 500 mg IV, 8 cases b) 15 min-6 hr, peak (54 mg/l) immediately after 1000 mg IV, 6 cases c) 15 min-6 hr, peak (16 mg/l) at end of 6 hr dwell time of 500 mg/2L dialysis fluid, 4 cases. Patients on continuous ambulatory peritoneal dialysis, 20-78 yr old, wt 62.5-103.6 kg, 7 males, 1 female Agar diffusion
BLOOD SERUM; DIALYSIS FLUID; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION				
Gross, M.L.; Somani, P.; Ribner, B.S.; Reseder, R.; Preimer, B.H.; Higgins, J.T., Jr. 1988 Clinical Pharmacology and Therapeutics 34(5):673-680				

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-(((2-amino-4-thiazolyl)(methoxyimino)(acetyl)amino)-3-oxo-, (6R-(6alpha,7beta(Z)))-
68401-81-0
C15-H15-N5-O5-S2
MW 383.40, MP 227 C (dec)

Tissue	Cases Exposure Route	Range	Mean	General Information
11520 Blood, serum	12 Injection	a) Not given b) Not given c) Not given d) Not given	a) 411+/-137 ug/ml b) 272+/-94 ug/ml c) 198+/-33 ug/ml d) 151+/-32 ug/ml	a) 0.25 hr b) 0.5 hr c) 1.5 hr d) 6.0 hr After 3.0 g IV. Patients with end-stage renal failure undergoing continuous ambulatory peritoneal dialysis Chills Well-plate diffusion
BLOOD SERUM; DELIBERATE EXPOSURE; ANTIBIOTICS; DRUGS; BIOAVAILABILITY Burgess, E.D.; Blair, A.D. 1985 Antimicrobial Agents and Chemotherapy 24(2):237-239				

Tissue	Cases Exposure Route	Range	Mean	General Information
11521 Cerebrospinal fluid	15 Injection	<0.5-20 ug/ml	8.53 ug/ml	200 mg/kg/d divided into 6 doses every 4 hr for at least 10 d. Samples taken 30-420 min after a dose. 2 mo-65 yr olds with meningitis Complications may have included vaginal pruritis, nausea & diarrhea, and localized phebitis. Increases in transaminases and alkaline phosphatase. Eosinophilia and thrombocytosis. Microbiological assay
BLOOD SERUM; CEREBROSPINAL FLUID; DELIBERATE EXPOSURE; INFANTS; CHILDREN; ADULTS; NERVOUS SYSTEM DISEASES; ANTIBIOTICS; DRUGS Overturf, G.D.; Cable, D.C.; Forthal, D.N.; Shikuma, C. 1984 Antimicrobial Agents and Chemotherapy 25(2):258-262				

Tissue	Cases Exposure Route	Range	Mean	General Information
11522 Dialysis fluid	8 Injection Dialysis	a) 2.2-10 mg/l b) 4-20 mg/l c) 208-53 mg/l	a) Not applicable b) Not applicable c) Not applicable	a) 15 min-6 hr, peak (10 mg/l) 6 hr after 500 mg IV, 8 cases b) 15 min-6 hr, peak (20 mg/l) 6 hr after 1000 mg IV, 6 cases c) 15 min-6 hr, peak (208 mg/l) at beginning of 6 hr dwell of 500 mg in dialysis fluid, 4 cases, 78+/-4% dose absorbed. Patients on continuous ambulatory peritoneal dialysis, 20-78 yr old, wt 62.5-103.6 kg, 7 males, 1 female Agar diffusion
BLOOD SERUM; DIALYSIS FLUID; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; INFECTION; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION Gross, M.L.; Somani, P.; Ribner, B.S.; Recader, R.; Preimer, E.H.; Higgins, J.T., Jr. 1983 Clinical Pharmacology and Therapeutics 34(5):673-680				

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-(((2-amino-4-thiazolyl)(methoxyimino)(acetyl)amino)-8-oxo-, (6R-(6alpha,7beta(Z)))-
68401-81-0
C13-H13-N5-O5-S2
MW 383.40, MP 227 C (dec)

Tissue	Cases Exposure Route	Range	Mean	General Information
11528 Dialysis fluid	12 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given	a) 7+/-7 ug/ml b) 24+/-15 ug/ml c) 47+/-17 ug/ml d) 71+/-30 ug/ml e) 91+/-28 ug/ml f) 91+/-20 ug/ml	a) 0.25 hr b) 0.5 hr c) 1.5 hr d) 3.0 hr e) 5.0 hr f) 6.0 hr After 8.0 g IV. Patients with end-stage renal failure undergoing continuous ambulatory peritoneal dialysis Chills Well-plate diffusion
BLOOD SERUM; DELIBERATE EXPOSURE; ANTIBIOTICS; DRUGS; BIOAVAILABILITY Burgess, E.D.; Blair, A.D. 1985 Antimicrobial Agents and Chemotherapy 24(2):287-289				

Tissue	Cases Exposure Route	Range	Mean	General Information
11534 Urine	20 Injection	a) 478+/-183-0.10+/-0.224 mg b) 264+/-100-7.54+/-1.68 mg c) 117+/-41.6-52.0+/-17.8 mg d) 1.81+/-2.11-19.0+/-8.66 mg	a) Not given b) Not given c) Not given d) Not given	a) Excreted in 0-2 hr and 24-48 intervals b) 2-4 hr and 24-48 hr intervals c) 0-2 and 18-24 hr intervals d) 0-2 and 24-48 hr intervals Ranges of means after 30 min infusion of 1 g. 4 hr hemodialysis at 24 hr postinfusion in d). Subjects ranged in health from normal in a) to having decreasing renal function and other diseases. Healthy and sick 26-64 yr olds Bioassay
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ANTIBIOTICS; DRUGS; METABOLISM Kowalsky, S.F.; Echols, R.M.; Venezia, A.R.; Andrews, E.A. 1985 Antimicrobial Agents and Chemotherapy 24(2):151-155				

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-(((2-amino-4-thiazolyl)(methoxyimino)acetyl)amino)-3-(((1-methyl-1H-tetrazol-5-yl)thio)methyl)-8-oxo-, (6R-(6alpha,7beta(Z)))-
65085-01-0
C16-H17-N9-O6-S3

Tissue	Cases Exposure Route	Range	Mean	General Information
11526 Blood, plasma	4 Injection	10.8+/-3.7 ug/ml-0.1+/-0.1 ug/ml	Not applicable	0.25 and 16 hr. Peak, 15.8+/-2.4 ug/ml at 1 hr after 500 mg dose IM. Range of means. Healthy adults, wt 68-92 kg Microbiological; HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; BIOLOGICAL MONITORING; DRUGS Machinist, J.M.; Bopp, B.A.; Quinn, D. 1984 Antimicrobial Agents and Chemotherapy 26(4):431-435				

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-(((2-amino-4-thiazolyl)(methoxyimino)acetyl)amino)-3-(((1-methyl-1H-tetrazol-5-yl)thio)methyl)-8-oxo-, (6R-(6alpha,7beta(Z)))-
65085-01-0
C16-H17-N9-O5-S3

Tissue	Cases Exposure Route	Range	Mean	General Information
11526 Blood, plasma	20 Injection	a) 88.8+/-21.2-1 ug/ml b) 95.5+/-65.5-1.3 ug/ml c) 95.5+/-65.5-0.4 ug/ml d) 95.5+/-65.5-0 ug/ml	a) Not given b) Not given c) Not given d) Not given	a) 0.08 and 4 hr after dose. Normal renal function (creatinine clearance-108 ml/min). 5 cases b) 0.08 and 8 hr after dose. Creatinine clearance-65 ml/min. Impaired renal function c) 0.08 and 24 hr after dose. Creatinine clearance-18 ml/min. Impaired renal function d) 0.08 and 28 hr after dose. Creatinine clearance-0 ml/min Dose: 10 mg/kg IV. Impaired renal function. Half-life increased with decreasing renal function. Volunteers HPLC

BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; ANTIBIOTICS; DRUGS
Gambertoglio, J.G.; Alexander, D.P.; Barriere, S.L. 1984 Antimicrobial Agents and Chemotherapy 26(6):845-849

Tissue	Cases Exposure Route	Range	Mean	General Information
11527 Blood, serum	a) 10 b) 4 c) 6 d) 8 e) 10 Injection	a) 87.2+/-16.3-0 ug/ml b) 116.0+/-9.0-0 ug/ml c) 94+/-9.2-1.2+/-0.9 ug/ml d) 113+/-8.6-3.8+/-2.7 ug/ml e) 23.3+/-11.4-2.4+/-4.0 ug/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable	a) Normal subjects, 0-12 hr, peak (87.2+/-16.3 ug/ml) at 0 point after 15 mg/kg infusion b) Mild renal insufficiency, 0-12 hr, peak (116.0+/-9.0 ug/ml) at 0 point after 15 mg/kg infusion c) Moderate renal insufficiency, 0-24 hr, peak (94+/-9.2 ug/ml) at 0 point after 15 mg/kg infusion d) Severe renal insufficiency, 0-24 hr, peak (113+/-8.6 ug/ml) at 0 point after 15 mg/kg infusion e) Hemodialysis patients, 1-48 hr, peak (23.3+/-11.4 ug/ml) at 1 hr after 15 mg/kg infusion. Healthy volunteers or patients with renal disease HPLC

BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ADULTS; INFECTION; DRUG THERAPY; KIDNEY DISEASES; ANTIBIOTICS; BIOACCUMULATION; DRUGS
Polk, R.E.; Sica, D.A.; Kerkering, T.M.; Kline, B.J.; Patterson, P.M.; Baggett, J.W. 1984 Antimicrobial Agents and Chemotherapy 26(3):322-327

Tissue	Cases Exposure Route	Range	Mean	General Information
11526 Urine	4 Injection	80.7+/-9.0-87.8+/-6%	Not applicable	2 hr and 5 days. 86.1+/-6% of 500 mg IM dose excreted by 12 hr, largely as unchanged drug. Range of means. Healthy adults, wt 68-92 kg HPLC; Microbiological

BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; BIOLOGICAL MONITORING; DRUGS
Machinist, J.M.; Bopp, B.A.; Quinn, D. 1984 Antimicrobial Agents and Chemotherapy 26(4):431-435

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-(((2-amino-4-thiazolyl)(methoxyimino)acetyl)amino)-3-(((1-methyl-1H-tetrazol-5-yl)thio)methyl)-8-oxo-, (6R-(6alpha,7beta(Z)))-
65085-01-0
C16-H17-N9-O5-S3

Tissue	Cases Exposure Route	Range	Mean	General Information
11529 Urine	a) 10 b) 4 c) 6 d) 3 e) 10 Injection	a) 64.3-97.4% b) 50.0-78.7% c) 5.2-54.5% d) 8.8-25.3% e) 2.8-28.3%	a) 81.1+/-11.1% b) 68.9+/-13.4% c) 37.1+/-19.4% d) 16.2+/-8.4% e) 1.20+/-5.9%	a) Normal subjects b) Patients with mild renal insufficiency c) Patients with moderate renal insufficiency d) Patients with severe renal insufficiency e) Hemodialysis patients % dose excreted in 24 hr. Healthy volunteers or patients with renal disease HPLC
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ADULTS; INFECTION; DRUG THERAPY; KIDNEY DISEASES; ANTIBIOTICS; BIOACCUMULATION; DRUGS Polk, R.E.; Sica, D.A.; Kerkering, T.M.; Kline, B.J.; Patterson, P.M.; Baggett, J.W. 1984 Antimicrobial Agents and Chemotherapy 26(3):322-327				

Tissue	Cases Exposure Route	Range	Mean	General Information
11580 Urine	13 Injection	a) 750-4800 ug/ml b) 26-82 ug/ml c) 8-98 ug/ml d) 19-200 ug/ml	a) Not given b) 50 ug/ml c) Not given d) Not given	a) Normal renal function. 0.5 hr after dose. 5 cases b) 4 hr after dose c) 6 hr after dose d) Impaired renal function. 24 hr after dose. 8 cases Dose: 10 mg/kg. 24 hr cumulative % of dose in urine: 81+/-6% in normals and 3-91% in impaired. Volunteers HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; KIDNEY DISEASES; ANTIBIOTICS; DRUGS Gambertoglio, J.G.; Alexander, D.P.; Barriere, S.L. 1984 Antimicrobial Agents and Chemotherapy 26(6):845-849				

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-(((2-amino-4-thiazolyl)(methoxyimino)acetyl)amino)-8-oxo-3(((1,2,5,6-tetrahydro-2-methyl-5,6-dioxo-1,2,4-triazin-3-yl)thio)methyl)-, (6R-(6alpha,7beta(Z)))-
73384-59-5
C18-H18-N8-O7-S3
MW 554.55

Tissue	Cases Exposure Route	Range	Mean	General Information
11581 Amniotic fluid	17 Injection	Not given	266.1 ug x hr/ml	2.0 g IV bolus during labor Area-under-concentration/time-curve 0-24 hr 22-42 yr olds and fetuses, 38-41 wk gestational age Microbiological
ADULTS; NEWBORN; BLOOD SERUM; MILK; PLACENTA; UMBILICAL CORD; URINE; ANTIBIOTICS; DRUGS; COMPARATIVE EVALUATIONS; PREGNANCY; DELIBERATE EXPOSURE Kafetzis, D.A.; Brater, D.C.; Panourgakis, J.E.; Voyatzis, J.; Georgakopoulos, P. 1983 Antimicrobial Agents and Chemotherapy 23(6):870-873				

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-(((2-amino-4-thiazolyl)(methoxyimino)acetyl)amino)-8-oxo-3(((1,2,5,6-tetrahydr o-2-methyl-5,6-dioxo-1,2,4-triazin-3-yl)thio)methyl)-, (6R-(6alpha,7beta(Z)))-
73384-59-5
C18-H18-N8-O7-S3
MW 554.58

Tissue	Cases Exposure Route	Range	Mean	General Information
11582 Blood, plasma	a) 5 b) 5 Injection	a) Not given b) Not given	a) 140% b) 320%	a) Fatty liver disease patients b) Cirrhosis patients with ascites Measured over 48 hr after 1 gram IV, lyophilized disodium salt. 31-57 yr old, 48-80 kg males and females with liver diseases HPLC
DRUGS; DRUG THERAPY; DELIBERATE EXPOSURE; CIRRHOSIS; LIVER DISEASES; ANTIBIOTICS; URINE; BLOOD PLASMA; METABOLISM				
Stoeckel, K.; Tuerk, H.; Trueb, V.; McNamara, P.J. 1984 Clinical Pharmacology and Therapeutics 36(4):500-509				

Tissue	Cases Exposure Route	Range	Mean	General Information
11583 Blood, plasma	2 Injection	a) 60-2 ug/ml b) 50-15 ug/ml	a) Not applicable b) Not applicable	a) 0.5-44 hrs, rapid decline from 60 ug/ml to 30 ug/ml at 2 hr, moderate decline hereafter, following 500 mg IV. Representative subject with normal nonrenal clearance b) 0.5-44 hrs, peak (50 ug/ml). At 2.5 hr after 500 mg IV. Representative subject with depressed nonrenal clearance. Patients with severe renal insufficiency HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; SWITZERLAND; ADULTS; INFECTION; KIDNEY DISEASES; ANTIBIOTICS; DRUGS; DRUG THERAPY; BIOACCUMULATION				
Stoeckel, K.; McNamara, P.J.; Hoppe-Seyler, G.; Blumberg, A.; Keller, E. 1983 Clinical Pharmacology and Therapeutics 33(5):633-641				

Tissue	Cases Exposure Route	Range	Mean	General Information
11584 Blood, plasma	8 Injection	a) 138+/-52-56+/-18 ug/ml b) 62+/-27-30+/-18 ug/ml	a) Not given b) Not given	a) 0.5 and 4 hr, in arterial plasma. Level 61+/-17 ug/ml at 0.25 hr b) 1 and 24 hr, in venous plasma Ranges of means after 1 g IV, infused over 30 min. Hemodialysis started simultaneously. Dialysate levels below assay sensitivity. Similar levels obtained after drug infusion done during interdialysis interval. Individual variability suggests that levels should be monitored during therapy in patients wih renal insufficiency. 32-62 yr old patients, with end-stage renal disease, undergoing hemodialysis 3X/wk, Columbia Presbyterian Medical Center, NY HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ANTIBIOTICS; DRUGS; HEMODIALYSIS; METABOLISM				
Cohen, D.; Appel, G.B.; Scully, B.; Neu, H.C. 1983 Antimicrobial Agents and Chemotherapy 24(4):529-532				

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-(((2-amino-4-thiazolyl)(methoxyimino)acetyl)amino)-8-oxo-3(((1,2,5,6-tetrahydr o-2-methyl-5,6-dioxo-1,2,4-triazin-3-yl)thio)methyl)-, (6R-(6alpha,7beta(Z)))-
73384-59-5
C18-H18-N8-O7-S3
MW 554.56

Tissue	Cases Exposure Route	Range	Mean	General Information
11585 Blood, plasma	15 Injection	a) 71.0-180.2 ug/ml b) 33.2-66.5 ug/ml c) 17.0-106.0 ug/ml d) 9.4-78.6 ug/ml e) 4.2-47.1 ug/ml	a) 114.8+/-35.4 ug/ml b) 67.3+/-19.5 ug/ml c) 60.4+/-18.8 ug/ml d) 44.2+/-16.6 ug/ml e) 19.6+/-9.6 ug/ml	a) Before surgery, 0.33-0.83 hr post infusion b) At sternectomy, 1-2.7 hr post-infusion c) Beginning of bypass procedure, 1.5-2.9 hr post infusion d) End of bypass, procedure 2.4-5.7 hr post-infusion e) Next morning, 16.1-24.7 hr post infusion Dose 1 g IV over 20-30 min, approx 1 hr before skin incision, 2 hr before bypass procedure. 40-68 yr olds (55.6+/-8.4), wt 53.5-121.6 kg (83.8+/-15.7) scheduled for cardiopulmonary bypass HPLC
DELIBERATE EXPOSURE; DRUGS; ANTIBIOTICS; BLOOD PLASMA; BONE; HEART; SURGERY Bryan, C.S.; Morgan, S.L.; Jordan, A.B.; Smith, C.W.; Sutton, J.P.; Gangemi, J.D. 1984 Antimicrobial Agents and Chemotherapy 25(1):27-30				

Tissue	Cases Exposure Route	Range	Mean	General Information
11586 Blood, plasma	a) 6 b) 6 c) 6 d) 5 e) 6 f) 5 Injection	a) 107.3-175 mg/l b) 2.5-7.6 mg/l c) 55.0-70.2 mg/l d) 52.4-67.5 mg/l e) 5.5-20.2 mg/l f) 5.0-15.3 mg/l	a) 136.2 mg/l b) 5.5 mg/l c) 65.6 mg/l d) 60.0 mg/l e) 11.9 mg/l f) 11.9 mg/l	a) Peak immediately after 7 mg/kg IV, controls b) 24 hr after 7 mg/kg IV, controls c) Peak immediately after 250 mg IV, hemodialysis patients d) Peak immediately after 250 mg IV, peritoneal dialysis patients e) 24 hr after 250 mg IV, hemodialysis patients f) 24 hr after 250 mg IV, peritoneal dialysis patients Recommended once-a-day dosage regimen for patients with severe renal insufficiency. Healthy volunteers and patients, 21-65 yr old HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; CANADA; ADULTS; KIDNEY DISEASES; INFECTION; ANTIBIOTICS; DRUG THERAPY; DRUGS; BIOACCUMULATION; BIOLOGICAL MONITORING; HEMODIALYSIS Ti, T.-Y.; Fortin, L.; Kreeft, J.H.; Bast, D.J.; Ogilvie, R.I.; Somerville, P.J. 1984 Antimicrobial Agents and Chemotherapy 25(1):83-87				

Tissue	Cases Exposure Route	Range	Mean	General Information
11587 Blood, serum	17 Injection	a) Not given b) Not given	a) 834.4 ug x hr/ml b) 651.9 ug x hr/ml	a) Umbilical cord b) Maternal 2.0 g IV bolus during labor Area-under-concentration/time-curve 0-24 hr 22-42 yr olds and fetuses, 38-41 wk gestational ages Microbiological
ADULTS; NEWBORN; BLOOD SERUM; MILK; PLACENTA; UMBILICAL CORD; URINE; ANTIBIOTICS; DRUGS; COMPARATIVE EVALUATIONS; PREGNANCY; DELIBERATE EXPOSURE Kafetzis, D.A.; Brater, D.C.; Panourgakis, J.E.; Voyatzis, J.; Georgakopoulos, P. 1983 Antimicrobial Agents and Chemotherapy 23(6):870-875				

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-(((2-amino-4-thiazolyl)(methoxyimino)acetyl)amino)-8-oxo-3(((1,2,5,6-tetrahydr o-2-methyl-5,6-dioxo-1,2,4-triazin-3-yl)thio)methyl)-, (6R-(6alpha,7beta(Z)))-

73384-59-5
C18-H18-N8-O7-S3
MW 554.58

Tissue	Cases Exposure Route	Range	Mean	General Information
11536 Bone	15 Injection	2.6-10.1 ug/g	4.7+/-2.1 ug/g	From sternum obtained during bypass procedure 1-2.7 hr post-infusion. Dose 1 g IV over 20-30 min, approx 1 hr before skin incision, 2 hr before bypass procedure. 40-68 yr olds (55.6+/-8.4), wt 53.8-121.8 kg (83.8+/-13.7) scheduled for cardiopulmonary bypass HPLC
11539 Heart	15 Injection	3.6-10.2 ug/g	7.7+/-1.8 ug/g	Atrial appendage sampled during bypass procedure, 1.5-2.9 hr post-infusion. Dose 1 g IV over 20-30 min, approx 1 hr before skin incision, 2 hr before bypass procedure. 40-68 yr olds (55.6+/-8.4), wt 53.8-121.8 kg (83.8+/-13.7) scheduled for cardiopulmonary bypass HPLC
DELIBERATE EXPOSURE; DRUGS; ANTIBIOTICS; BLOOD PLASMA; BONE; HEART; SURGERY Bryan, C.S.; Morgan, S.L.; Jordan, A.B.; Smith, C.W.; Sutton, J.P.; Gangemi, J.D. 1984 Antimicrobial Agents and Chemotherapy 25(1):37-39				

Tissue	Cases Exposure Route	Range	Mean	General Information
11540 Milk	a) 10 b) 10 Injection	a) Not given b) Not given	a) 11.8+/-4.5 ug x hr/ml b) 21.0+/-2.5 ug x hr/ml	a) 1.0 g IV bolus b) 1.0 g IM Day 3 postpartum. Area-under-concentration/time-curve data 19-34 yr olds, lactating, breast feeding for 2 days Microbiological
11541 Placenta	17 Injection	Not given	162.6 ug x hr/g	2.0 g IV bolus during labor Area-under-concentration/time-curve 0-24 hr 22-42 yr olds and fetuses, 38-41 wk gestational age Microbiological
ADULTS; NEWBORN; BLOOD SERUM; MILK; PLACENTA; UMBILICAL CORD; URINE; ANTIBIOTICS; DRUGS; COMPARATIVE EVALUATIONS; PREGNANCY; DELIBERATE EXPOSURE Kafetzis, D.A.; Brater, D.C.; Panourgakis, J.E.; Voyatzis, J.; Georgakopoulos, P. 1985 Antimicrobial Agents and Chemotherapy 28(6):870-873				

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-(((2-amino-4-thiazolyl)(methoxyimino)acetyl)amino)-8-oxo-3(((1,2,5,6-tetrahydr o-2-methyl-5,6-dioxo-1,2,4-triazin-3-yl)thio)methyl)-, (6R-(6alpha,7beta(Z)))-

73384-59-5
C16-H16-N8-O7-S3
MW 554.56

Tissue	Cases Exposure Route	Range	Mean	General Information
11842 Urine	a) 8 b) 8 c) 4 d) 5 Injection	a) 57-60% b) 37-48% c) 49-55% d) 69-79%	a) 45.8+/-6.8% b) 50.6+/-10.6% c) 66.3+/-14.8% d) 74.2+/-4.21%	a) Normal subjects b) Fatty liver disease patients c) Cirrhosis patients d) Cirrhosis patients with ascites % of dose in urine for 48 hr. Dose 1000 mg IV, lyophilized disodium salt. c), d) significantly different from normal subjects, $p<0.05$. 22-28 yr old, 66-81 kg healthy males. 31-57 yr old, 43-89 kg males and females with liver diseases HPLC
DRUGS; DRUG THERAPY; DELIBERATE EXPOSURE; CIRRHOSIS; LIVER DISEASES; ANTIBIOTICS; URINE; BLOOD PLASMA; METABOLISM Stoeckel, K.; Tuerk, H.; Trueb, V.; McNamara, P.J. 1984 Clinical Pharmacology and Therapeutics 36(4):500-509				

Tissue	Cases Exposure Route	Range	Mean	General Information
11843 Urine	6 Injection	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) 17.0 ug/ml b) 37.0 ug/ml c) 15.7 ug/ml d) 53.0 ug/ml e) 92.0 ug/ml f) 6.0 ug/ml	a) Delivery at 1 hr b) Delivery at 2 hr c) Delivery at 4 hr d) Delivery at 6 hr e) Delivery at 12 hr f) Delivery at 24 hr Times after 2.0 g IV bolus during labor. Newborn's first void. 22-42 yr olds and fetuses, 36-41 wk gestational age Microbiological
ADULTS; NEWBORN; BLOOD SERUM; MILK; PLACENTA; UMBILICAL CORD; URINE; ANTIBIOTICS; DRUGS; COMPARATIVE EVALUATIONS; PREGNANCY; DELIBERATE EXPOSURE Kafetzis, D.A.; Brater, D.C.; Panourgakis, J.E.; Voyatzis, J.; Georgakopoulos, P. 1983 Antimicrobial Agents and Chemotherapy 23(6):870-873				

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-(((2-amino-4-thiazolyl)acetyl)amino)-3-(((1-(2-(dimethylamino)ethyl)-1H-tetrazol-5-yl)thio)methyl)-8-oxo-, (6R-trans)-
61622-34-2
C18-H23-N9-O4-S3

Tissue	Cases Exposure Route	Range	Mean	General Information
11514 Amniotic fluid	58 Injection	Not detectable-23.5 ug/ml	Not given	Levels increased from 1 hr after 19.6 ug/ml at 2 hr 10 min, 19.8 ug/ml at 2 hr 15 min and 23.5 ug/ml at 2 hr 27 min. Decreased followed. Each value from different mother. Levels fluctuated rather greatly compared to blood levels. Effective levels for at least 24 hr. At 0.05 and 2.27 hr after 1 g IV. Decreased up to 31 hr. Samples from 1 individual/time point. Normal pregnant volunteers: 4 primiparas, 3 multiparas (24-37 yr old) at 37-41 wk gestation, 17 primiparas, 21 multiparas (21-37 yr old) in labor. Japan Cylinder plate diffusion
11545 Blood	42 Injection	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) 12.1-15.9 ug/ml h) 11.5->1 ug/ml	) 112.0+/-13.9 ug/ml b) 13.4+/-4.6 ug/ml c) 4.3+/-1.7 ug/ml d) 1.7+/-0.5 ug/ml e) 0.5+/-0.2 ug/ml f) 23.9 g) Not given h) Not given	a) 7 pregnant women, 5 min after 1 gm IV b) 1 hr c) 2 hr d) 3 hr e) 5 hr f) Umbilical cord (fetal blood), 15 min after 1 gm IV to mother, 1 case g) 20-45 min after dose, 6 cases h) 1-6 hr after close, 21 cases Umbilical cord sample at delivery. After 3 hr, fetal level higher than maternal. Normal pregnant volunteers: 4 premparas, 3 multiparas (24-37 yr old) at 37-41 wk gestation, 17 primiparas, 21 multiparas, 21-37 yr old, in labor. Japan Cylinder plate diffusion
BLOOD; AMNIOTIC FLUID; DELIBERATE EXPOSURE; ADULTS; ANTIBIOTICS; PREGNANCY; TRANSPLACENTAL TRANSFER Miyakawa, I.; Inque, H.; Kuroki, T.; Lee, H.C.; Asegami, M.; Mori, N. 1984 Antimicrobial Agents and Chemotherapy 25(1):147-148				

Tissue	Cases Exposure Route	Range	Mean	General Information
11546 Blood, plasma	16 Injection	a) 5.15-0.5 ug/ml b) 10.6-0.75 ug/ml c) 22.7-1.9 ug/ml d) 4.7-9.7 ug/ml e) 9.2-19.5 ug/ml	a) Not given b) Not given c) Not given d) 7.4+/-2 ug/ml e) 13.5+/-3.4 ug/ml	a) 1 & 4 hr after 0.5 mg IV, 8 cases b) 1 & 4 hr after 1.0 mg IV, 8 cases c) 1 & 4 hr after 2.0 mg IV, 8 cases c) 0.5-1 hr after 0.5 IM, 8 cases e) 0.5-1 hr after 1.0g IM, 8 cases 20-28 yr old healthy volunteers HPLC
11547 Urine	16 Injection	50-59% of dose	Not given	Total for 12 hr. Doses were: 0.5, 1.0 & 2.0g IV and 0.5 and 1.0g IM. Level not dose-dependant. 20-28 yr old healthy volunteers HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; ANTIBIOTICS; DRUGS Brisson, A.-M.; Bryskier, A.; Millerioux, L.; Fourtillan, J.-B. 1984 Antimicrobial Agents and Chemotherapy 26(4):513-518				

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-((amino(4-hydroxyphenyl)acetyl)amino)-3-methyl-8-oxo-, (6R-(6alpha,7beta(R*)))-
50870-12-2
C16-H17-N3-O5-S
MW 365.42

Tissue	Cases Exposure Route	Range	Mean	General Information
11548 Blood, serum	17 Ingestion	11.6-48.3 ug/ml	Not given	3-4 hr after 1000 mg. Patients undergoing renal surgery, 7 with normal and 10 with impaired renal function, 26-76 yr, 54-105 kg HPLC
11549 Kidney	17 Ingestion	14.2-115 ug/ml	Not given	3-4 yr after 1000 mg. Patients undergoing renal surgery, 7 with normal and 10 with impaired renal function, 26-76 yr, 54-105 kg HPLC
BLOOD SERUM; KIDNEYS; DELIBERATE EXPOSURE; GERMANY; ANTIBIOTICS; DRUGS; SURGERY				
Degen, V.J.; Ringwelski, L.; Maier-Lenz, H. 1983 Arzneimittel-Forschung/Drug Research 33(II)9:1339-1342				

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-((amino-1,4-cyclohexadien-1-ylacetyl)amino)-3-methyl-8-oxo-, (6R-(6alpha,7beta(R*)))-
58621-58-8
C16-H19-N3-O4-S
MW 349.41, MP 140-142 C (decomp)

Tissue	Cases Exposure Route	Range	Mean	General Information
11550 Blood, serum	Injection	a) Not given b) Not given	a) 70.5+/-2.5 ug/ml b) 68.9+/-6.0 ug/ml	a) 1 g cephradine b) Same dose plus 1 g aztreonam Maxima after IV delivery over 30 min. Healthy subjects, 8 caucasian, 1 black. Average age, 24 yrs, ht 178 cm, wt 74 kg HPLC
11551 Urine	Injection	a) Not given b) Not given	a) 71.3+/-2.8% b) 61.4+/-6.7%	a) Cephradine b) Cephradine + Aztreonam % of dose excreted in 24 hrs. 1 g dose of each drug infused over 30 min. Healthy subjects, 8 caucasian, 1 black. Average age, 24 yrs, ht 178 cm, wt 74 kg HPLC
BLOOD SERUM; URINE; DELIBERATE EXPOSURE; ANTIBIOTICS; COMPARATIVE EVALUATIONS; DRUG INTERACTION; DRUGS				
Creasey, W.A.; Adamovics, J.; Dhruv, R.; Plat, T.B.; Sugerman, A.A. 1984 Journal of Clinical Pharmacology 24:174-180				

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-((hydroxyphenylacetyl)amino)-3-(((1-methyl-1H-tetrasol-5-yl)thio)methyl)-8-oxo -, (6R-(6alpha,7beta(R*)))-
54444-01-4
C18-H18-N6-O5-S2
MW 462.54

Tissue	Cases Exposure Route	Range	Mean	General Information
11553 Bile	a) 2 b) 1 c) 1 d) 1 e) 1 f) 2 Injection	a) 4.6-8.0 ug/ml b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) 9.8-47.5 ug/ml	a) 6.4 ug/ml b) 5.0 ug/ml c) 19.1 ug/ml d) 28.9 ug/ml e) 8.2 ug/ml f) 28.7 ug/ml	a) Peak 2 hr after 2 g IV 1 hr before biliary decompression b) Peak 2 hr after 2 g IV 0.2 hr before biliary decompression c) Peak 0.5 hr after 2 g IV 1 hr after biliary decompression d) Peak 3 hr after 2 g IV 1 hr after biliary decompression e) Peak 0.5 hr after 2 g IV 1 hr after biliary decompression f) Peak 1 hr after 2 g IV 24 hr after biliary decompression. Patients who had undergone surgery for bile duct obstruction, 2 female, 4 male, age 38-62 yr Well diffusion assay

BLOOD SERUM; BILE; DELIBERATE EXPOSURE; ADULTS; LIVER DISEASES; GASTROINTESTINAL DISEASES; INFECTION; CARCINOMAS; ANTIBIOTICS; SURGERY; DRUG THERAPY; DRUGS; BIOACCUMULATION

Levi, J.U.; Martinez, O.V.; Malinin, T.I.; Zeppa, R.; Livingstone, A.; Hutson, D.; Calhoun, P. 1984 Antimicrobial Agents and Chemotherapy 26(6):944-46

Tissue	Cases Exposure Route	Range	Mean	General Information
11555 Blood, serum	9 Injection	a) 4.0-19.0 ug/ml b) 0.5-1.8 ug/ml	a) Not given b) Not given	a) Continuous IV, total dose 8 g/d, 5 cases b) Immediately prior to doses: 1 g every 4 hr (5 cases) & every 3 hr (1 case). All patients were cured. 16-40 yr old typhoid fever patients Agar diffusion

BLOOD SERUM; DELIBERATE EXPOSURE; ADOLESCENTS; ADULTS; INFECTION; DISEASES; ANTIBIOTICS; DRUGS

Uwaydah, M.; Nassar, N.T.; Harakeh, H.; Vartivarian, S.; Talhouk, A.; Kantarjian, H. 1984 Antimicrobial Agents and Chemotherapy 26(3):426-427

Tissue	Cases Exposure Route	Range	Mean	General Information
11554 Blood, serum	a) 2 b) 1 c) 8 d) 3 Injection	a) 27.4-43.7 ug/ml b) Not applicable c) 77.2-116 ug/ml d) 95.6-180 ug/ml	a) 35.6 ug/ml b) 63.7 ug/ml c) 75.4 ug/ml d) 133.9 ug/ml	A) Peak 1 hr after 2 g IV 1 hr before biliary decompression b) Peak 0.25 hr after 2 g IV 0.2 hr before biliary decompression c) Peak 0.25 hr after 2 g IV 1 hr after biliary decompression d) Peak 0.25 hr after 2 g IV 24 hr after biliary decompression Ranges of peaks. Patients who had undergone surgery for bile duct obstruction, 2 female, 4 male, age 38-62 yr Well diffusion assay

BLOOD SERUM; BILE; DELIBERATE EXPOSURE; ADULTS; LIVER DISEASES; GASTROINTESTINAL DISEASES; INFECTION; CARCINOMAS; ANTIBIOTICS; SURGERY; DRUG THERAPY; DRUGS; BIOACCUMULATION

Levi, J.U.; Martinez, O.V.; Malinin, T.I.; Zeppa, R.; Livingstone, A.; Hutson, D.; Calhoun, P. 1984 Antimicrobial Agents and Chemotherapy 26(6):944-46

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-((hydroxyphenylacetyl)amino)-8-oxo-3-(((1-(sulfomethyl)-1H-tetrazol-5-yl)thio) methyl)-, (6R-(6alpha,7beta(R*)))-
61270-58-4
C18-H18-N6-O8-S3

Tissue	Cases Exposure Route	Range	Mean	General Information
11555 Blood, plasma	4 Injection	a) 95-8 mg/L b) 100-2.5 mg/L c) 110-9 mg/L d) 130-30 mg/L	a) Not given b) Not given c) Not given d) Not given	a) At 5 min and 12 hr, normal subjects, Clcr (creatinine clearance) >80 ml/min b) At 5 min and 48 hr, mild renal insufficiency, Clcr 50-80 ml/min c) At 5 min and 48 hr, moderate to severe renal impairment, 8-49 ml/min d) At 5 min and 70 hr, end-stage renal disease, <8 ml/min After 7.5 mg/kg dose, Time and ranges estimated from graph, 4 representative cases from group of 21 tested. Well-plate diffusion
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ANTIBIOTICS; DRUGS; DRUG THERAPY; COMPARATIVE EVALUATIONS; METABOLISM Blair, A.D.; Maxwell, B.M.; Forland, S.C.; Jacob, L.; Cutler, R.E. 1984 Clinical Pharmacology and Therapeutics 35(6):798-803				

Tissue	Cases Exposure Route	Range	Mean	General Information
11556 Blood, serum	a) 7 b) 7 c) 7 d) 7 e) 6 f) 6 g) 6 h) 6 Injection	a) 45.2-144.6 ug/ml b) 48.0-138.3 ug/ml c) 46.6-108.0 ug/ml d) 44.8-97.8 ug/ml e) 69.1-218.6 ug/ml f) 58.5-218.6 ug/ml g) 52.5-161.3 ug/ml h) 53.8-161.1 ug/ml	a) 107.0+/-24.2 ug/ml b) 85.5+/-30.1 ug/ml c) 70.4+/-17.5 ug/ml d) 66.4+/-16.1 ug/ml e) 147.7+/-63.2 ug/ml f) 137.8+/-57.8 ug/ml g) 110.0+/-41.8 ug/ml h) 113.9+/-46.1 ug/ml	a) Beginning of cardiac surgery, 78+/-24 min after 1 g i.m. b) At atrial biopsy, 114+/-31 min after 1 g i.m. c) After 15 min on bypass, 133+/-29 min after 1 g i.m. d) End of bypass procedure, 186+/-42 min after 1 g i.m. e) Beginning of surgery, 96+/-15 min after 2 g i.m. f) At atrial biopsy, 129+/-26 after 2 g i.m. g) After 15 min on bypass, 152+/-43 min after 2 g i.m. h) End of bypass procedure, 186+/-52 min after 2 g i.m. 45-75 yr olds Well diffusion assay
11557 Heart	a) 7 b) 6 Injection	a) 2.6-13.4 ug/g b) 4.3-23.4 ug/g	a) 7.5+/-3.6 ug/g b) 10.2+/-7.4 ug/g	a) Level in right atrial wall biopsy, 114+/-31 min after 1 g i.m. b) Level in right atrial wall biopsy, 129+/-26 min after 2 g i.m. 45-75 yr olds Well diffusion assay
BLOOD SERUM; HEART; DELIBERATE EXPOSURE; ADULTS; CARDIOVASCULAR DISEASES; HEART DISEASES; INFECTION; ANTIBIOTICS; DRUG THERAPY; DRUGS; SURGERY; BIOPSIES; BIOACCUMULATION Sterling, R.P.; Connor, D.J.; Norman, J.C.; Cooley, D.A. 1983 Antimicrobial Agents and Chemotherapy 23(5):790-792				

Tissue	Cases Exposure Route	Range	Mean	General Information
11558 Urine	21 Injection	a) 205-650 mg/L b) 110-440 mg/L c) 39-170 mg/L d) 10-34 mg/L	a) Not given b) Not given c) Not given d) Not given	a) Normal subjects Clcr (creatinine clearance) >80 ml/min b) Mild renal insufficiency, Clcr 50-80 ml/min c) Moderate to severe renal impairment, Clcr 8-49 ml/min d) End-stage renal disease, Clcr <8 ml/min Mean 0-24 hr collection after IV 7.5 mg/kg dose. HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ANTIBIOTICS; DRUGS; DRUG THERAPY; COMPARATIVE EVALUATIONS; METABOLISM Blair, A.D.; Maxwell, B.M.; Forland, S.C.; Jacob, L.; Cutler, R.E. 1984 Clinical Pharmacology and Therapeutics 35(6):798-803				

5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-(2-amino-2-phenylacetamido)-3-methyl-8-oxo-, D- (8 CI) 5-Thia-1-azabicyclo(4.2.0)oct-2-ene-2-carboxylic acid, 7-((aminophenylacetyl)amino)-3-methyl-8-oxo-, (6R-(6alpha,7beta(R*)))- (9 CI)
15686-71-2
C16-H17-N3-O4-S
MW 347.4

Tissue	Cases Exposure Route	Range	Mean	General Information
11569 Blood, plasma	5 Ingestion	32-1.5 ug/ml	Not given	3 and 48 hr after 500 mg. Initially 25 ug/ml at 1 hr Estimated from graph 53.4+/-17 yr olds treated with continuous ambulatory peritoneal dialysis for 8.4+/-4.6 mo Microbiological
ADULTS; KIDNEY DISEASES; BLOOD PLASMA; ANTIBIOTICS; COMPARATIVE EVALUATIONS; DRUGS Bunke, C.M.; Aronoff, G.R.; Brier, M.E.; Sloan, R.S.; Luft, F.C. 1983 Clinical Pharmacology and Therapeutics 33(1):66-72				

5-Thiazoleacetic acid, 4-(p-chlorophenyl)-2-phenyl- (8 CI); 5-Thiazoleacetic acid, 4-(4-chlorophenyl)-2-phenyl- (9 CI)
18046-21-4
C17-H12-Cl-N-O2-S

Tissue	Cases Exposure Route	Range	Mean	General Information
11560 Blood, plasma	10 Ingestion	a) 1050-4880 ng/ml b) <20-84 ng/ml c) Not given d) <20-49 ng/ml e) Not given f) <20-38 ng/ml g) Not given h) <50-178 ng/ml i) Not given j) 182-447 ng/ml k) Not given l) 162-368 ng/ml	a) 2670+/-450 ng/ml b) <20 ng/ml c) 8450+/-850 ng/ml d) 27 ng/ml e) 4080+/-610 ng/ml f) <20 ng/ml g) 1240+/-190 ng/ml h) 70 ng/ml i) 1500+/-250 ng/ml j) 214 ng/ml k) 1990+/-320 ng/ml l) 199 ng/ml S.E.	a) 0.75-3.0 (median 1.0) hr, d 1 b) 12 hr, d 1 c) 0.75-4.0 (median 1.25) hr, d 8 d) 12 hr, d 8 e) 0.5-2.0 (median 0.87) hr, d 15 f) 12 hr, d 15 g) Metabolite, hydroxyfentiazac, 0.75-3.0 (median 1.75) hr, d 1 h) 12 hr, d 1 i) 0.75-4.0 (median 1.25) hr, d 8 j) 12 hr, d 8 k) 0.75-2.0 (median 1.0) hr, d 15 l) 12 hr d 15 Measured after first dose on given day. Dose: 200 mg 2x/d for 15 d. Significant differences: g) & i) and g) & k) ($p<0.01$). 25.1+/-1.6 hr old healthy, drug-free volunteers (wt 74.2+/-4.4 kg) HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; ANTIINFLAMMATORY AGENTS; DRUGS; METABOLITES Dowell, P.S.; Pierce, D.M.; Franklin, R.A.; Norrie, R.; Harries, H.; Whiteland, H. 1984 Xenobiotica 14(12):947-955				

Tissue	Cases Exposure Route	Range	Mean	General Information
11561 Urine	5 Ingestion	11.1-24.2%	18.4+/-2.6%	% total radioactivity recovered in 120 hrs after 200 mg. Excretion primarily in feces, with a mean 67.2+/-2.7% recovered in 5 d. Healthy volunteers, 40.8+/-3.6 yr old, wt 69.8+/-3.9 kg Scintillation counting
URINE; DELIBERATE EXPOSURE; ADULTS; RHEUMATOID ARTHRITIS; ANALGESICS; ANTIPYRETICS; ANTIINFLAMMATORY AGENTS; DRUGS; DRUG THERAPY; BIOACCUMULATION; RADIONUCLIDES Franklin, R.A.; Norrie, R.; Shepherd, N.W.; Rhenius, S.T. 1984 Xenobiotica 14(12):955-960				

5,12-Naphthacenedione, 10-((3-amino-2,3,6-trideoxy-beta-L-arabino-hexopyranosyl)oxy)-7,8,9,10-tetrahydr o-6,8,11-trihydroxy-8-(hydroxyacetyl)-1-methoxy-, (8S-cis)-
66420-45-2
C27-H29-N-O11

Tissue	Cases Exposure Route	Range	Mean	General Information
11562 Urine	6 Injection	a) Not given b) Not given c) Not given d) Not given	a) 57% b) 32% c) 7% d) 5%	a) Parent drug b) 4'-O-B-D-glucuronide c) 13-dihydro-4'-epidoxorubicin d) 13-dihydro-4'-epidoxorubicin gulcuronide Single dose, 75 mg/sq m. 12% of dose excreted in 24 hr. b)-d) are metabolites 24 hr, pooled samples. Cancer patients, 44-68 yr old, Milan, Italy HPLC

URINE; DELIBERATE EXPOSURE; ITALY; CARCINOMAS; ANTITUMOR AGENTS; CHEMOTHERAPY; METABOLITES; MEASUREMENT METHODS; DRUGS; DRUG THERAPY
Cassinelli, G.; Configlacchi, E.; Penco, S.; Rivola, G.; Arcamone, F.; Pacciarini, A.; Ferrari, L. 1984 Drug Metabolism and Disposition 12(4):506-510

5,12-Naphthacenedione, 9-acetyl-7-((3-amino-2,3,6-trideoxy-alpha-L-lyxo-hexopyranosyl)oxy)-7,8,9,10-tet rahydro-6,9,11-trihydroxy-, (7S-cis)-
53957-92-9
C26-H27-N-O9

Tissue	Cases Exposure Route	Range	Mean	General Information
11563 Blood, plasma	2 Injection Ingestion	a) 200-6 ng/ml b) 6-20 ng/ml c) 2-2.5 ng/ml d) 2-20 ng/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable	a) Parent drug, 12.5 mg/sq m IV bolus, 1 case b) Metabolite, 4-DMDR-ol c) Parent drug, 50 mg/sq m, single oral dose, 1 case, peak 20 ng/ml at 4 hr d) Metabolite, 4-DMDR-ol, peak 70 ng at 4 hr at 5 min and 30 hr. Estimated from graph. Data in a), b) representative of 3 cases. Cancer patients HPLC

BLOOD PLASMA; DELIBERATE EXPOSURE; NEOPLASMS; MELANOMAS; SARCOMAS; ANTITUMOR AGENTS; DRUGS; DRUG THERAPY; METABOLITES
Berman, E.; Wittes, R.E.; Leyland-Jones, B.; Casper, E.S.; Gralla, R.J.; Howard, J.; Williams, L.; Barats, R.; Young, C.W. 1983 Cancer Research 43:6096-6101

5,8,11,14-Eicosatetraenoic acid, (all-Z)-
506-32-1
C20-H32-O2
MW 304.46, MP -49.5 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11564 Blood, plasma	5 Injection	a) 150 dpm b) 150-500 dpm	a) 150 dpm b) 263 dpm	a) 2 controls, no cholinergic stimulation, radiopeak migrating with PGI(sub 2), standard after 30 uCi IV as sodium salt b) 3 subjects, subcutaneous dose of 5 ug/kg carbaminoylcholine followed by 30 uCi IV as sodium salt. Radiopeak migrating with PGI(sub 2) standard Human pulmonary vasculature can synthesize prostacycline and well do so in respone to cholinergic stimulation. Healthy volunteers, 21-26 yr old TLC
BLOOD PLASMA; DELIBERATE EXPOSURE; SWEDEN; ADULTS; HORMONES; ANTICOAGULANTS; METABOLISM; RADIOISOTOPES; DRUGS Brandt, R.; Dembinska-Kiec, A.; Korbut, R.; Grygiewski, R.J.; Nowak, J. 1984 Archives of Pharmacology 325:69-75				

5beta-Card-20(22)-enolide, 3beta-((2,6-dideoxy-4-O-(2,6-dideoxy-beta-D-ribo-hexopyranosyl)-beta-D-ribo-hexo pyranosyl)oxy)-14-hydroxy- (8 CI); Card-20(22)-enolide, 3-((2,6-dideoxy-4-O-(2,6-dideoxy-beta-D-ribo-hexopyranosyl)-beta-D-ribo-hexopyra nosyl)oxy)-14-hydroxy-, (3beta,5beta)- (9 CI)
16479-50-8
C36-H54-O10

Tissue	Cases Exposure Route	Range	Mean	General Information
11565 Blood, serum	1 Injection	500-1 pmol/ml	Not applicable	0-250 hr, rapid decline to 40 pmol/ml by 24 hr following 0.83 mg IV. No difference in renal clearance between normal subjects and patients with renal insufficiency. Patient with renal insufficiency RIA
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; KIDNEY DISEASES; ANTIARRHYTHMIC AGENTS; BIOACCUMULATION; DRUG THERAPY; METABOLITES; DRUGS Graves, P.E.; Fenster, P.E.; MacFarland, R.T.; Marcus, F.I.; Perrier, D. 1984 Clinical Pharmacology and Therapeutics 36(5):607-12				

Tissue	Cases Exposure Route	Range	Mean	General Information
11566 Blood, serum	5 Injection	300-3 pmol/ml	Not applicable	0-300 hr, rapid decline from 300 pmol/ml to 25 pmol/ml in 24 hr, moderate decline therafter, following 0.83 mg IV. Healthy volunteers, 23-74 yr old RIA
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; ANTIARRHYTHMIC AGENTS; BIOACCUMULATION; DRUG THERAPY; DRUGS; METABOLITES Graves, P.E.; Fenster, P.E.; MacFarland, R.T.; Marcus, F.I.; Perrier, D. 1984 Clinical Pharmacology and Therapeutics 36(5):601-606				

5H-Dibenz(b,f)azepine-5-carboxamide
298-46-4
C15-H12-N2-O
MW 236.26, MP 204-206 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11567 Blood	3	a) 5.1-5.6 ug/ml b) 5.7 ug/ml c) 7.4 ug/ml	Not given	3 children administered drug for treatment of seizure. 2 were given 20 mg/kg/d, increased in 2 wks to 25 mg/kg/d. 1 was given 13.6 mg/kg/d for 4 weeks. Each child experienced 60th onset of multiple tics in head, trunk, and extremities, as well as vocalisations. Blood levels were within therapeutic range. This type of reaction considered rare. 7 yr old female, 12 yr old male, 8 yr old male Onset of Tourette's syndrome, worsening of tics and vocalizations.

BLOOD; DELIBERATE EXPOSURE; CASE HISTORIES; CHILDREN; CENTRAL NERVOUS SYSTEM DISEASES; ANTICONVULSANTS; DRUG THERAPY; COMPARATIVE EVALUATIONS; HEALTH HAZARDS; DRUGS

Neglia, J.P.; Glaze, D.G.; Zion, T.E. 1984 Pediatrics 73(6):841-844

Tissue	Cases Exposure Route	Range	Mean	General Information
11566 Blood, cells	2 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 23 mg/l b) 18 mg/l c) 38 mg/l d) 26 mg/l	a) Male with acute poisoning, before 4-hr hemoperfusion with haemocol b) After treatment c) Female with acute poisoning, before 4-hr hemoperfusion with Adsorba 300 C d) After treatment Both hospitalized within 12 hr of poisoning. 22 yr old non-epileptic male. 45 yr old epileptic female hospitalized with overdoses of carbamazepine Male: aggressive, excited, stuporous, eventually comotose. Female: stuporus, restless, eventually comatose Decreased blood pressure and pulse rate in female HPLC
11569 Blood, plasma	2 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 29 mg/l b) 19 mg/l c) 27 mg/l d) 20 mg/l	a) Male with acute poisoning, before 4-hr hemoperfusion with haemocol b) After treatment c) Female with acute poisoning, before 4-hr hemoperfusion with Adsorba 300 C d) After treatment Both hospitalized within 12 hr of poisoning. 22 yr old non-epileptic male. 45 yr old epileptic female hospitalized with overdoses of carbamazepine Male: aggressive, excited, stuporous, eventually comotose. Female: stuporus, restless, eventually comatose Decreased blood pressure and pulse rate in female HPLC

CONSUMER EXPOSURE; ACCIDENTAL POISONING; METABOLISM; METABOLITES; DRUGS; DRUG THERAPY; NETHERLANDS; ANTICONVULSANTS; BEHAVIOR DISORDERS; HEMOPERFUSION; DELIBERATE EXPOSURE

de Groot, G.; van Heijst, A.N.P.; Maes, R.A.A. 1984 Clinical Toxicology 22(4):349-362

5H-Dibenz(b,f)azepine-5-carboxamide
298-46-4
C15-H12-N2-O
MW 236.26, MP 204-206 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11570 Blood, plasma	4	486-717 umol/lxhr	597 umol/lxhr	After 200 mg, oral. Area-under-the-curve data. Healthy subjects HPLC
ADULTS; BLOOD PLASMA; URINE; ANTICONVULSANTS; DELIBERATE EXPOSURE; METABOLISM; DRUGS Tomson, T.; Tybring, G.; Bertilsson, L. 1983 Clinical Pharmacology and Therapeutics 33(1):58-65				

Tissue	Cases Exposure Route	Range	Mean	General Information
11571 Blood, plasma	1	a) 30-35 umol/l b) Not given c) Not given	a) Not given b) 120 umol/l c) 35 umol/l	a) 200 mg (tegretol) 7X/d, for 7.5 yr b) 4 d after also taking 250 mg erythromycin base (Eryc) 4X/d c) 48 hr after stopping erythromycin. 27 yr old epileptic with pneumonia Uncontrollable limb movements, loss of balance, vertigo and incoordination of both gait and limbs with nystagmus (with combined erythromycin and carbamazepine) Severe neurotoxicity
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; CENTRAL NERVOUS SYSTEM DISEASES; ANTICONVULSANTS; DRUGS; DRUG THERAPY; DRUG INTERACTION Vajda, F.J.E.; Bladin, P.F. 1984 Medical Journal of Australia 140(2):81				

Tissue	Cases Exposure Route	Range	Mean	General Information
11572 Blood, plasma	1 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given	a) 2.3 mg/l b) 4.5 mg/l c) 4.2 mg/l d) 1.8 mg/l e) 2.0 mg/l f) 4.0 mg/l g) 4.8 mg/l h) 2.6 mg/l	a) 1 hr b) 12 hr c) 30 hr d) 72 hr e) 1 hr f) 12 hr g) 30 hr h) 72 hr After 400 mg. In e)-h), 250 mg erythromycin given every 6 hr for 5 d before and 3 d after dose. Clearance was lower with erythromycin. Estimated from graph. Data representative of 8 subjects. Healthy adult nonsmoker Lethargy HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; ANTICONVULSANTS; DRUGS; DRUG INTERACTION Wong, Y.Y.; Ludden, T.M.; Bell, R.D. 1983 Clinical Pharmacology and Therapeutics 33(4):460-464				

5H-Dibenz(b,f)azepine-5-carboxamide
298-46-4
C15-H12-N2-O
MW 236.26, MP 204-206 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11578 Blood, serum	1	42-11 umol/L	Not given	During and after stopping, treatment with 900-1200 mg/d White cell counts related to drug levels. When leucopenia is not dose-related, use of carbamazepine is debatable. 27-yr old epileptic, with leucopenia Monitoring of blood counts necessary during therapy to detect leucopenia or other cell disorders which might develop White cell counts related to drug levels

BLOOD SERUM; DELIBERATE EXPOSURE; CASE HISTORIES; NERVOUS SYSTEM DISEASES; BLOOD DISORDERS; NEUROLOGIC MANIFESTATIONS; ANTICONVULSANTS; DRUGS
Rush, J.A.; Beran, R.G. 1984 Medical Journal of Australia 140:426-428

Tissue	Cases Exposure Route	Range	Mean	General Information
11574 Blood, serum	14 Ingestion	a) 22.8+/-7.6-17.2+/-7.0 umol/l b) 7.4+/-2.8-5.1+/-2.1 umol/l c) 28.8+/-7.2-16.8+/-7.4 umol/l d) 7.9+/-2.3-5.8+/-2.1 umol/l e) 24.5+/-11.6-16.5+/-8.9 umol/l f) 8.9+/-2.9-5.6+/-2.0 umol/l	a) 19.6+/-7.0 umol/l b) 6.2+/-2.2 umol/l c) 22.3+/-7.4 umol/l d) 6.9+/-2.1 umol/l e) 25.7+/-10.2 umol/l f) 7.8+/-2.3 umol/l	a) Day 28. Mean dose 13.7 mg/kg/d (Tegretol), divided 3X/d b) Metabolite, 10,11-carbamazepine epoxide c) Day 56. Dose during wk 5-8 divided 2X/d d) 10,11-carbamazepine epoxide e) Day 84. Single daily dose during wk 9-12 f) 10,11-carbamazepine epoxide Ranges of means. Sampled 8, 12, 20 and 24 hr, before medication. Each total daily dose kept unaltered during 12 wk study. (Patients had been receiving drug 3X/d for 0.5-5 yr, in addition to other anticonvulsants, which were administered in their usual dosage during study.) Levels within therapeutic range during all 3 regimes. Seizure frequency unaffected by reduction in dosage frequency. No significant correlation between levels and total daily dose. 16-18 yr old epileptics HPLC

BLOOD SERUM; DELIBERATE EXPOSURE; CENTRAL NERVOUS SYSTEM DISEASES; ANTICONVULSANTS; DRUG INTERACTION; DRUG THERAPY; DRUGS; COMPARATIVE EVALUATIONS; METABOLISM; METABOLITES
Ghose, K.; Fry, D.E.; Christfides, J.A. 1983 European Journal of Clinical Pharmacology 24:375-381

Tissue	Cases Exposure Route	Range	Mean	General Information
11575 Urine	9	0-229.9 ug/ml	Not given	300-600 mg dose plus 100-250 mg phenytoin. Sampled daily 1-5 d after dose. 25-68 yr olds HPLC

URINE; JAPAN; DELIBERATE EXPOSURE; CENTRAL NERVOUS SYSTEM DISEASES; ANTICONVULSANTS; MEASUREMENT METHODS; DRUGS; DRUG THERAPY; METABOLITES
Sato, A.; Shimada, K. 1983 Journal of Chromatography 275:97-105

5H-Dibenz(b,f)azepine-5-carboxamide
298-46-4
C15-H12-N2-O
MW 236.26, MP 204-206 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11576 Urine	4	20.8-31.4% of dose	20.5+/-2.9% of dose	trans-CBZ-diol metabolite. Dose, 200 mg carbamazepine, oral Healthy subjects HPLC
ADULTS; BLOOD PLASMA; URINE; ANTICONVULSANTS; DELIBERATE EXPOSURE; METABOLISM; DRUGS Tomson, T.; Tybring, G.; Bertilsson, L. 1983 Clinical Pharmacology and Therapeutics 33(1):58-65				

5H-Dibenz(b,f)azepine-5-carboxamide, 10,11-dihydro-10-oxo-
28721-07-5
C15-H12-N2-O2

Tissue	Cases Exposure Route	Range	Mean	General Information
11577 Blood, plasma	1 Ingestion	a) 0-0.1 ug/g b) 0.5-1.4 ug/g	a) Not applicable b) Not applicable	a) 0-5 hr, peak (0.4 ug/g) 1 hr after 300 mg tablet b) GP47 779 metabolite, 0.5-24 hr, peak (25 ug/g) 4 hr after 300 mg tablet New assay. Minor metabolite CGP 10 000 not detected at this dosage. Healthy volunteer HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; SWITZERLAND; NEUROLOGIC MANIFESTATIONS; ANTICONVULSANTS; DRUGS; DRUG THERAPY; MEASUREMENT METHODS; BIOACCUMULATION; METABOLITES Menge, G.; Dubois, J.P. 1983 Journal of Chromatography 275:189-194				

5H-Dibenz(b,f)azepine, 10,11-dihydro-5-(3-methylamino)propyl)- (8 CI); 5H-Dibenz(b,f)azepine-5-propanamine, 10,11-dihydro-N-methyl- (9 CI)
50-47-5
C18-H22-N2
MW 266.37, BP 172-174 C at 0.02 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
11578 Blood	a) 7 b) 10 c) 10	a) 6-32 mg/l b) 0.6-8.6 mg/l c) 0.88-8.5 mg/l	a) 13.5 mg/l b) 3.0 mg/l c) 3.2+/-2.9 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths, 1979-1980. Autopsy, Maryland State Medical Examiners office. Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

5H-Dibenz(b,f)azepine, 10,11-dihydro-5-(3-methylamino)propyl)- (8 CI); 5H-Dibenz(b,f)azepine-5-propanamine, 10,11-dihydro-N-methyl- (9 CI)
50-47-5
C18-H22-N2
MW 266.37, BP 172-174 C at 0.02 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
11579 Blood, plasma	11 Injection	a) Not given b) Not given c) Not given	a) 42.6 ng/ml b) 81.0 ng/ml c) 59.6 ng/ml	a) Peak after 100 mg b) Steady-state after 67.5 mg/d for up to 17 d c) Steady-state after 125 mg/d for up to 17 d. Healthy volunteers, 6 females, 5 males, 20-25 yr old GC/MS
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DEPRESSION; ANTIDEPRESSIVE AGENTS; DRUGS; DRUG THERAPY; HORMONES; BIOACCUMULATION; BLOOD PRESSURE Ross, R.J.; Zavadil, A.P.; Calil, H.M.; Linnoila, M.; Kitanaka, I.; Blombery, P.; Kopin, I.J.; Potter, W.E. 1983 Clinical Pharmacology and Therapeutics 33(4):429-437				

Tissue	Cases Exposure Route	Range	Mean	General Information
11580 Blood, plasma	26 Ingestion	a) Not given b) Not given c) Not given d) Not given	a) 200+/-133 ng/ml b) 73+/-84 ng/ml c) 46+/-17 ng/ml d) 46+/-27 ng/ml	a) After 2.77 mg/kg 3x/day for 3 wk, responding subjects b) After 2.5 mg/kg 3x/day for 3 wk, non-responding subjects c) 2-OH-desipramine (metabolite) after 2.77 mg/kg 3x/day for 3 wk responders d) 2-OH-desipramine (metabolite) after 2.5 mg/kg 3x/day for 3 wk, non-responders 2-OH-desipramine levels did not correlate with antidepressant response. Hospitalized depressed patients Orthostatic hypertension, delirium, constipation, urinary retention, severe tremor, seizures. Major adverse reactions more frequent when antipsychotic drugs also given. HPLC
ADULTS; BEHAVIOR DISORDERS; BLOOD PLASMA; ANTIDEPRESSIVE AGENTS; COMPARATIVE EVALUATIONS; METABOLITES; PSYCHOTROPIC DRUGS; DELIBERATE EXPOSURE Nelson, J.C.; Bock, J.L.; Jatlow, P.I. 1983 Clinical Pharmacology and Therapeutics 33(5):183-189				

Tissue	Cases Exposure Route	Range	Mean	General Information
11581 Blood, plasma	6 Ingestion	a) 22.7-312 ng/ml b) 18-76.3 ng/ml c) 120-480 ng/ml d) 66-126 ng/ml	a) Not given b) Not given c) Not given d) Not given	a) Steady-state, 150 mg/day b) Steady-state, metabolite, 2-hydroxydesipramine, 150 mg/day c) Steady-state, 300 mg/day d) Steady-state, metabolite, 300 mg/day Rise in drug level proportionately greater than increase in dosage. Physically healthy patients with major depression, 18-65 yr GC; HPLC-ED
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; ANTIDEPRESSIVE AGENTS; DRUGS; BIOACCUMULATION Cooke, R.G.; Warsh, J.J.; Stancer, H.C.; Reed, K.L.; Persad, E. 1984 Clinical Pharmacology and Therapeutics 36(3):343-349				

5H-Dibens(b,f)asepine, 10,11-dihydro-5-(3-methylamino)propyl)- (8 CI); 5H-Dibens(b,f)asepine-5-propanamine, 10,11-dihydro-N-methyl- (9 CI)
50-47-5
C18-H22-N2
MW 266.37, BP 172-174 C at 0.02 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
11562 Blood, plasma	82 Ingestion	a) 20-876 ng/ml b) 7-134 ng/ml c) 128-905 ng/ml d) 33-468 ng/ml e) 7-84 ng/ml f) 87-910 ng/ml g) 92-178 ng/ml h) 205-355 ng/ml	a) 166 ng/ml b) 45.4 ng/ml c) 513 ng/ml d) 233 ng/ml e) 47 ng/ml f) 599 ng/ml g) 129 ng/ml h) 267 ng/ml	a) 47 controls b) Unconjugated 2-OH-form, 47 controls c) Total 2-OH-form, 47 controls d) With antipsychotic drug, 35 cases e) Unconjugated 2-OH-form, with antipsychotic drug, 35 cases f) Total 2-OH-form, with antipsychotic drug, 35 cases g) Before perphenazine, 3 cases h) Water perphenazine, 3 cases Steady-state. Control group dose 1.8-4.0 mg/kg/d. Antipsychotic drug group dose 0.5-3.8 mg/kg/d. Perphenazine dose 12-24 mg/d. Depressed inpatients, 30 males, 52 females, 21-78 yr old HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; BEHAVIOR DISORDERS; DEPRESSION; ANTIDEPRESSIVE AGENTS; DRUGS; DRUG THERAPY; DRUG INTERACTION; BIOACCUMULATION Bock, J.L.; Nelson, C.; Gray, S.; Jatlow, P.I. 1983 Clinical Pharmacology and Therapeutics 33(5):322-328				

Tissue	Cases Exposure Route	Range	Mean	General Information
11583 Urine	18 Ingestion	a) 0.24-1.84 umol b) 1.08-24.20 umol	a) 1.03 umol b) 12.28 umol	a) 24 hr excretion total following 25 mg dose b) 24 hr excretion of hydroxylated metabolite following 25 mg dose. Means calculated from table. 13 male, 5 female, 22-50 yr old. Phenotyped with respect to debrisoquine hydroxylation. HPLC
URINE; DELIBERATE EXPOSURE; SWEDEN; ADULTS; BEHAVIOR DISORDERS; DEPRESSION; ANTIDEPRESSIVE AGENTS; DRUG THERAPY; DRUGS; BIOLOGICAL MONITORING; METABOLITES; METABOLISM Spina, E.; Birgesson, C.; von Bahr, C.; Ericsson, O.; Mellstrom, B.; Steiner, E.; Sjoqvist, F. 1984 Clinical Pharmacology and Therapeutics 36(5):677-682				

5H-Dibenz(b,f)azepine, 3-chloro-5-(3-(dimethylamino)propyl)-10,11-dihydro- (8 CI); 5H-Dibenz(b,f)azepine-5-propanamine, 3-chloro-10,11-dihydro-N,N-dimethyl- (9 CI)
303-49-1
C19-H23-Cl-N2
MW 314.87, BP 160-170 C at 0.3 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
11584 Blood	1 Ingestion	a) Not given b) Not given	a) 540 ng/ml b) 580 ng/ml	a) Autopsy. Dose unknown b) N-desmethylclomipramine (metabolite) Levels suggest chronic poisoning. Combined levels of ethanol, methanol, isopropanol <5 mg/dl. Data also for zomepirac, caffeine, salicylates, acetaminophen, indomethacin, oxycodone, lorazepam. 57 yr old treated for depression, joint pain. Excessive drinking on occasion. Confusion, weakness, intoxication, death TLC; GC/MS
11585 Urine	1 Ingestion	a) Not given b) Not given	a) 350 ng/ml b) 700 ng/ml	a) Autopsy. Dose unknown b) N-desmethylclomipramine (metabolite) Levels suggest chronic poisoning. Combined levels of ethanol, methanol, isopropanol <5 mg/dl. Data also for zomepirac, caffeine, salicylates, acetaminophen, indomethacin, oxycodone, lorazepam. 57 yr old treated for depression, joint pain. Excessive drinking on occasion. Confusion, weakness, intoxication, death TLC; GC/MS

AUTOPSIES; BEHAVIOR DISORDERS; NEUROLOGIC MANIFESTATIONS; BLOOD; URINE; ANTIDEPRESSIVE AGENTS; ANALGESICS; DRUGS; DRUG ABUSE; ALCOHOLS; METABOLITES; CASE HISTORIES; DELIBERATE EXPOSURE
Meatherall, R.C.; Guay, D.R.P.; Chalmers, J.L.; Keenan, J.R. 1988 Journal of Analytical Toxicology 7:168-171

5H-Dibenz(b,f)azepine, 5-(3-(dimethylamino)-2-methylpropyl)-10,11-dihydro- (8 CI); 5H-Dibenz(b,f)azepine-5-propanamine, 10,11-dihydro-N,N,beta-trimethyl- (9 CI)
739-71-9
C20-H26-N2
MW 294.44, MP 45 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11586 Blood	1 Ingestion	a) Not applicable b) Not applicable	a) 400 ng/ml b) 1180 ng/ml	a) Parent compound b) N-desmethyl metabolite Autopsy data. Dose unknown. Fatalities associated with >1000 ng/ml levels of common tricyclic antidepressants. Accidental overdose victim Profound coma, respiratory arrest, hypotension, status epilepticus, cardiac arrhythmias GC/MS

BLOOD; CONSUMER EXPOSURE; ADULTS; CANADA; AUTOPSIES; DEPRESSION; ANTIDEPRESSIVE AGENTS; DRUG ABUSE; DRUG THERAPY; DRUGS; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; METABOLITES; HEALTH HAZARDS
Meatherall, R.C.; Guay, D.R.P.; Nokes, J.M.; Keenan, J.R. 1988 Journal of Forensic Sciences 28(4):1023-1029

5H-Dibens(b,f)azepine, 5-(3-(dimethylamino)-2-methylpropyl)-10,11-dihydro- (8 CI); 5H-Dibens(b,f)azepine-5-propanamine, 10,11-dihydro-N,N,beta-trimethyl- (9 CI)
739-71-9
C20-H26-N2
MW 294.44, MP 45 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11587 Blood, plasma	9 Injection Ingestion	a) 9.6-25.2 ml/min/kg b) 14.5-51.3 ng/ml	a) 15.9+/-1.5 ml/min/kg b) 26.2+/-4.4 ng/ml	a) Total metabolic clearance after 12.5 mg IV as methanesulfonate b) Peak (at 3.1+/-0.6 hr) after 50 mg oral dose as maleate. 6 males, 3 females, age 31-68 yr, healthy volunteers GC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; ANTIDEPRESSIVE AGENTS; DRUG THERAPY; BIOACCUMULATION; BIOAVAILABILITY; DRUGS Abernethy, D.R.; Greenblatt, D.J.; Shader, R.I. 1984 Clinical Pharmacology and Therapeutics 35(3):348-353				

Tissue	Cases Exposure Route	Range	Mean	General Information
11588 Blood, plasma	29	a) 11-241 ng/ml b) 3-382 ng/ml c) 3-40 ng/ml d) 3-49 ng/ml e) 58-1126 ng/ml f) 63-800 ng/ml	a) 86 ng/ml b) 65 ng/ml c) 16 ng/ml d) 17 ng/ml e) 379 ng/ml f) 317 ng/ml	a) Parent drug, 29 cases b) Demethyl metabolite, 28 cases c) Unconjugated 2-hydroxy metabolite, 29 cases d) Unconjugated 2-hydroxy demethyl metabolite, 28 cases e) Total 2-hydroxy metabolite, 28 cases f) Total 2-hydroxy demethyl metabolite, 28 cases 14 received 75 mg/d, 15 received 150 mg/d. New assay. Depressed patients, 18-65 yr old HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DEPRESSION; ANTIDEPRESSIVE AGENTS; DRUGS; DRUG THERAPY; BIOACCUMULATION; METABOLITES Suckow, R.F.; Cooper, T.B. 1984 Journal of Pharmaceutical Sciences 73(12):1745-1748				

5H-Dibens(b,f)azepine, 5-(3-(dimethylamino)propyl)-10,11-dihydro- (8 CI); 5H-Dibens(b,f)azepine-5-propanamine, 10,11-dihydro-N,N-dimethyl- (9 CI)
50-49-7
C19-H24-N2
MW 280.40, BP 160 C at 0.01 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
11589 Blood	a) 5 b) 9 c) 9	a) 0.07-27 mg/l b) 0.1-10 mg/l c) 0.5-26 mg/l	a) 9.7 mg/l b) 2.6 mg/l c) 8.6+/-9.2 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths, 1979-1980. Autopsy, Maryland State Medical Examiners office. Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS Caplan, Y.H.; Ottinger, W.E.; Crooke, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

5H-Dibenz(b,f)azepine, 5-(3-(dimethylamino)propyl)-10,11-dihydro- (8 CI); 5H-Dibenz(b,f)azepine-5-propanamine, 10,11-dihydro-N,N-dimethyl- (9 CI)
50-49-7
C19-H24-N2
MW 280.40, BP 160 C at 0.01 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
11590 Blood, plasma	2 Injection Ingestion	a) 81-0.8 ng/ml b) 16-0.2 ng/ml c) 14-0.8 ng/ml d) 29-0.3 ng/ml	a) Not given b) Not given c) Not given d) Not given	a) At 1-72 hr, 12.5 mg IV, control b) At 6-72 hr, 2 ng/ml at 2 hr, 50 mg oral, control c) At 1-96 hr, 12.5 mg IV, oral contraceptive user d) At 5-96 hr, 3 ng/ml at 3 hr, 50 mg oral, oral contraceptive user Times and levels estimated from graph. Clearance data given for 16 subjects. Increased bioavailability in OCS users. Healthy adults, 20-30 yr, 52-77 kg, non-smokers GC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUGS; DRUG INTERACTION; ANTIDEPRESSIVE AGENTS; BIOAVAILABILITY Abernethy, D.R.; Greenblatt, D.J.; Shader, R.I. 1984 Journal of Clinical Pharmacology and Therapeutics 35(6):792-797				

Tissue	Cases Exposure Route	Range	Mean	General Information
11591 Blood, plasma	6 Injection Ingestion	a) Not given b) Not given	a) 19.3+/-1.8 ng/ml b) 34.4+/-6.0 ng/ml	a) Peak after 50 mg oral b) Peak after 300 mg cimetidine every 6 hr and 50 mg oral Cimetidine impaired clearance and enhanced bioavailability. Healthy volunteers GC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DEPRESSION; ANTIDEPRESSIVE AGENTS; DRUG INTERACTION; DRUG THERAPY; BIOACCUMULATION; BIOAVAILABILITY; BIOLOGICAL MONITORING; DRUGS Abernethy, D.R.; Greenblatt, D.J.; Shader, R.I. 1984 Journal of Pharmacology and Experimental Therapeutics 229(3):702-705				

Tissue	Cases Exposure Route	Range	Mean	General Information
11592 Blood, plasma	15 Ingestion	a) 61-397 ng/ml b) 28-300 ng/ml c) 74-385 ng/ml	a) 165.0+/-93.5 ng/ml b) 140.0+/-83.8 ng/ml c) 186.0+/-95.0 ng/ml	a) Peak, 2.5+/-0.92 hr after 210.0+/-94.0 mg b) Desmethyl metabolite, peak, 4.1+/-2.80 hr after 210.0+/-94.0 mg c) Steady-state, parent plus desmethyl metabolite, after 210.0+/-94.0 mg Dosage was that required to reduce ventricular premature depolarizations by at least 80%. Patients with ventricular premature depolarizations GC
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; HEART DISEASES; CARDIOVASCULAR DISEASES; DEPRESSION; ANTIARRHYTHMIC AGENTS; ANTIDEPRESSIVE AGENTS; DRUGS; DRUG THERAPY; BIOACCUMULATION Giardina, E.-G.V.; Louie, M.; Bigger, J.T., Jr.; Brem, R.; Aichevsky, D. 1983 Clinical Pharmacology and Therapeutics 34(3):284-289				

5H-Dibenz(b,f)azepine, 5-(3-(dimethylamino)propyl)-10,11-dihydro- (8 CI); 5H-Dibenz(b,f)azepine-5-propanamine, 10,11-dihydro-N,N-dimethyl- (9 CI)
50-49-7
C19-H24-N2
MW 280.40, BP 160 C at 0.01 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
11508 Blood, plasma	24 Ingestion	a) 79-320 nmol/l b) 78-652 nmol/l c) 23.63 nmol/l d) 35-134 nmol/l e) 0-63 nmol/l f) 79-389 nmol/l g) 550-1175 nmol/l h) 0-76 nmol/l i) 0-223 nmol/l j) 28-146 nmol/l k) 41-361 nmol/l l) 73-1296 nmol/l m) 0.65 nmol/l n) 0-166 nmol/l o) 0-66 nmol/l	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given k) Not given l) Not given m) not given n) Not given o) Not given	a) Imipramine, dose 50-100 mg/day b) Desipramine (metabolite) c) 2-OH-imipramine (metabolite) d) 2-OH-desipramine (metabolite) e) Didesipramine (metabolite) f) Imipramine, dose 50-300 mg/day g) Desipramine (metabolite) h) 2-OH-imipramine (metabolite) i) 2-OH-desipramine (metabolite) j) Didesipramine (metabolite) k) Imipramine, dose 100 mg/day l) Desipramine (metabolite) m) 2-OH-imipramine (metabolite) n) 2-OH-desipramine (metabolite) o) Didesipramine (metabolite) Steady state concentrations in hospitalised, elderly depressed patients in a)-e), recurrent depression outpatients in f)-j), placebo crossover study with diabetic neuropathy outpatients k)-o). 30-78 yr olds TLC
CANADA; ADULTS; BEHAVIOR DISORDERS; BLOOD PLASMA; BLOOD SERUM; ANTIDEPRESSIVE AGENTS; DELIBERATE EXPOSURE; DRUGS Gram, L.F.; Bjerre, M.; Kragh-Sorensen, P.; Kvinesdal, B.; Molin, J.; Pedersen, O.L.; Reisby, N. 1983 Clinical Pharmacology and Therapeutics 33(3):335-342				

Tissue	Cases Exposure Route	Range	Mean	General Information
11504 Blood, plasma	6 Ingestion	a) Not given b) Not given	a) 80.7+/-63.0 ng/ml b) 72.8+/-35.4 ng/ml	a) Peak after 100 mg b) Same as a), with pretreatment of 1200 mg/d cimetidine for 2 d Median peak at 2.5 hr in a), 4 hr in b). Decreased clearance and greater bioavalability after cimetidine. Active metabolite, desipramine, <10 ng/ml during entire study. Healthy 20-23 yr old volunteers, wt 65-75 kg Pretreatment with cimetidine may produce toxicity during tricyclic treatment GLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ANTIDEPRESSIVE AGENTS; DRUG INTERACTION; DRUGS; METABOLISM; METABOLITES Heuauer, S.A.; Hollister, L.E. 1984 Clinical Pharmacology and Therapeutics 35(2):183-187				

5H-Dibenz(b,f)azepine, 5-(3-(dimethylamino)propyl)-10,11-dihydro- (8 CI); 5H-Dibenz(b,f)azepine-5-propanamine, 10,11-dihydro-N,N-dimethyl- (9 CI)
50-49-7
C19-H24-N2
MW 280.40, BP 160 C at 0.01 mm Hg

Tissue	Cases Exposure Route	Range	Mean	General Information
11595 Blood, serum	8 Ingestion	a) 1000-14 nmol/l b) 500-20 nmol/l c) 175-16 nmol/l d) 250-22 nmol/l e) 50-12 nmol/l f) 100-12 nmol/l	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) Imipramine, overdose b) Desipramine (metabolite) c) 2-OH-imipramine (metabolite) d) 2-OH-desipramine (metabolite) e) Didesipramine (metabolite) f) Imipramine-N-oxide (metaboite) Combined data estimated from graphs 26-47 yr old overdose cases TLC
CANADA; ADULTS; BEHAVIOR DISORDERS; BLOOD PLASMA; BLOOD SERUM; ANTIDEPRESSIVE AGENTS; DELIBERATE EXPOSURE; DRUGS Gram, L.F.; Bjerre, M.; Kragh-Sorensen, P.; Kvinesdal, B.; Molin, J.; Pedersen, O.L.; Reisby, N. 1983 Clinical Pharmacology and Therapeutics 33(3):335-342				

5H-Dibenzo(a,d)cyclohepten-10-ol, 10,11-dihydro-5-(3-(methylamino)propylidene)-
1156-99-6
C19-H21-N-O

Tissue	Cases Exposure Route	Range	Mean	General Information
11596 Blood, plasma	6	a) Not given b) Not given	a) 127.7+/-44.0 ng/ml b) 119.1+/-44.6 ng/ml	a) Peak after 100 mg nortriptyline b) Same as a), with pretreatment of 1200 mg/d cimetidine for 2 d Median peak at 8 hr in a), 4 hr in b). Metabolite, levels always much higher than parent drug. Bioavailability increased after cimetidine, in most subjects. Healthy 20-28 yr old volunteers, wt 65-75 kg Pretreatment with cimetidine may produce toxicity during tricyclic treatment
BLOOD PLASMA; DELIBERATE EXPOSURE; ANTIDEPRESSIVE AGENTS; DRUG INTERACTION; DRUGS; METABOLISM; METABOLITES Henauer, S.A.; Hollister, L.E. 1984 Clinical Pharmacology and Therapeutics 35(2):183-187				

Tissue	Cases Exposure Route	Range	Mean	General Information
11597 Blood, plasma	a) 15 b) 6	a) 40-483 ng/ml b) 41-219 ng/ml	a) 230.8+/-122.5 ng/ml b) 130.3+/-69.5 ng/ml	a) Metabolite (E isomer), during wk 3 and 4 of treatment on steady dose of 0.92-1.77 mg/kg nortriptyline. Elderly group b) Same as a) on steady dose of 1.06-2.20 mg/kg. Young group Levels unrelated to dosage in mg/kg. Ratio of metabolite to parent drug > twice as high in a), with large individual variations. Low positive correlation between this ratio and serum creatinine. Psychiatric patients, 2 age groups: =/> 60 yr, and =/< 40 yr, New York Hospital-Cornell Medical Center, Westchester Division HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; NEW YORK; AGE; DEPRESSION; ANTIDEPRESSIVE AGENTS; DRUGS; METABOLISM; METABOLITES; DRUG THERAPY Young, R.C.; Alexopoulos, G.S.; Shamoian, C.A.; Manley, M.W.; Dhar, A.K.; Kutt, H. 1984 Clinical Pharmacology and Therapeutics 35(4):540-544				

5H-Dibenzo(a,d)cycloheptene-delta(5,gamma)-propylamine, 10,11-dihydro-N-methyl- (8 CI); 1-Propanamine, 3-(10,11-dihydro-5H-dibenzo(a,d)cyclohepten-5-ylidene)-N-methyl- (9 CI)
72-69-5
C19-H21-N
MW 263.37, MP 218-215 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11598 Blood	a) 38 b) 24 c) 14 d) 10 e) 14	a) 0.2-7.3 mg/l b) Not given c) 0.20-12 mg/l d) 0.5-6.2 mg/l e) 0.2-7.3 mg/l	a) 2.5 mg/l b) 0.72 mg/l c) 2.0+/-3.1 mg/l d) 2.6 mg/l e) 2.26 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths, 1979-1980 d) Single-drug deaths, without ethanol, 1975-1980 e) Single-drug deaths, with ethanol, 1975-1980. Autopsy, Maryland State Medical Examiners office. Death
BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS				
Caplan, Y.H.; Ottinger, W.E.; Crooks, C.R. 1983 Journal of Analytical Toxicology 7:225-230				

Tissue	Cases Exposure Route	Range	Mean	General Information
11599 Blood, plasma	6 Ingestion	a) Not given b) Not given	a) 31.5+/-9.5 ng/ml b) 32.6+/-10.1 ng/ml	a) Peak after 100 mg b) Same as a), with pretreatment of 1200 mg/d cimetidine for 2 d Median peak at 5 hr in a), 7 hr in b). No significant differences in clearance. Healthy 20-23 yr old volunteers, wt 65-75 kg Pretreatment with cimetidine may produce toxicity during tricyclic treatment GLC
BLOOD PLASMA; DELIBERATE EXPOSURE; ANTIDEPRESSIVE AGENTS; DRUG INTERACTION; DRUGS; METABOLISM; METABOLITES				
Henauer, S.A.; Hollister, L.E. 1984 Clinical Pharmacology and Therapeutics 35(2):183-187				

Tissue	Cases Exposure Route	Range	Mean	General Information
11600 Blood, plasma	a) 15 b) 6	a) 36-200 ng/ml b) 78-135 mg/ml	a) 106.1+/-50.4 ng/ml b) 112+/-24.4 ng/ml	a) During wk 3 and 4 of treatment on steady dose of 0.92-1.77 mg/kg. Elderly group b) During same period as a) on steady dose of 1.06-2.20 mg/kg. Young group Levels unrelated to dosage in mg/kg. Relationships between parent drug and metabolite, 10-hydroxynortriptyline, discussed. Psychiatric patients, 2 age groups: =/> 60 yr, and =/< 40 yr, New York Hospital-Cornell Medical Center, Westchester Division HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; NEW YORK; AGE; DEPRESSION; ANTIDEPRESSIVE AGENTS; DRUGS; METABOLISM; METABOLITES; DRUG THERAPY				
Young, R.C.; Alexopoulos, G.S.; Shamoian, C.A.; Manley, M.W.; Dhar, A.K.; Kutt, H. 1984 Clinical Pharmacology and Therapeutics 35(4):540-544				

5H-Dibenzo(a,d)cycloheptene-delta(5,gamma)-propylamine, 10,11-dihydro-N,N-dimethyl- (8 CI); 1-Propanamine, 3-(10,11-dihydro-5H-dibenzo(a,d)cycloheptene-5-ylidene)-N,N-dimethyl- (9 CI)

50-48-6
C20-H23-N
MW 277.39, MP Hydrochloride 196-197 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11601 Blood	a) 56 b) 41 c) 15 d) 20 e) 16	a) 0.8-22.9 mg/l b) 0.1-3.2 mg/l c) 0.14-17 mg/l d) 0.7-23 mg/l e) 0.8-17 mg/l	a) 7.0 mg/l b) 0.64 mg/l c) 3.7+/-4.3 mg/l d) 8.0 mg/l e) 5.64 mg/l	a) Single-drug deaths, 1975-1980 b) Non-drug related deaths, 1975-1980 c) Multiple-drug related deaths, 1979-1980 d) Single-drug deaths, without ethanol, 1975-1980 e) Single-drug deaths, with ethanol, 1975-1980. Autopsy, Maryland State Medical Examiners office. Death

BLOOD; CONSUMER EXPOSURE; MARYLAND; AUTOPSIES; SUICIDE; DRUG ABUSE; DRUGS; DRUG THERAPY; FORENSIC MEDICINE; ACCIDENTAL POISONING; BIOACCUMULATION; HEALTH HAZARDS

Caplan, Y.H.; Ottinger, W.E.; Crooke, C.R. 1988 Journal of Analytical Toxicology 7:225-230

Tissue	Cases Exposure Route	Range	Mean	General Information
11602 Blood, plasma	5 Ingestion	a) 44.7-114 ng/ml b) 44.7-170 ng/ml c) 60-108 ng/ml d) 60-160 ng/ml	a) Not given b) Not given c) Not given d) Not given	a) Steady-state, 150 mg/day b) Steady-state, metabolite, nortriptyline, 150 mg/day c) Steady-state, 200 mg/day d) Steady-state, metabolite, 200 mg/day. Physically healthy patients with major depression, 18-65 yr GC

BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; ANTIDEPRESSIVE AGENTS; DRUGS; BIOACCUMULATION

Cooke, R.G.; Warsh, J.J.; Stancer, H.C.; Reed, K.L.; Persad, E. 1984 Clinical Pharmacology and Therapeutics 36(3):343-349

Tissue	Cases Exposure Route	Range	Mean	General Information
11603 Blood, serum	14 Ingestion	a) 15-59 ug/l b) 15-157 ug/l c) 50-237 ug/l d) 35-248 ug/l e) 45-257 ug/l f) 30-188 ug/l g) 45-225 ug/l	a) 30 ug/l b) 73 ug/l c) 128 ug/l d) 111 ug/l e) 111 ug/l f) 108 ug/l g) 110+/-48 ug/l	a) Day 2 b) Day 7 c) 3 wk d) 6 wk e) 9 wk f) 13 wk g) Steady state level Days after start of therapy calculated as mean of 6, 19 and 13 wk levels 150 mg/d for 3 mo. Riboflavin added to tablets to check compliance. Metabolite levels also given. Ranges of means. 20-61 yr olds with depression Dry mouth, constipation, drowsiness and blurred vision Orthostatic hypotension HPLC

BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; DEPRESSION; ANTIDEPRESSIVE AGENTS; DRUGS; DRUG THERAPY

Edelbroek, P.M.; Zitman, F.G.; Schreuder, J.N.; Rooymans, H.G.M.; de Wolff, F.A. 1984 Clinical Pharmacology and Therapeutics 35(4):467-473

5H-Dibenzo(a,d)cycloheptene-delta(5,gamma)-propylamine, 10,11-dihydro-N,N-dimethyl- (8 CI); 1-Propanamine, 3-(10,11-dihydro-5H-dibenzo(a,d)cycloheptene-5-ylidene)-N,N-dimethyl- (9 CI)
50-48-6
C20-H23-N
MW 277.39, MP Hydrochloride 196-197 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11604 Blood, serum	10 Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) 51.3+/-5.9 ng/ml b) 79.3+/-7.5 ng/ml c) 92.0+/-7.6 ng/ml d) 12.7+/-2.8 ng/ml e) 45.8+/-6.0 ng/ml f) 58.4+/-10.8 ng/ml	a) 1 hr after A.M. dose b) 2 hr after A.M. dose c) 3 hr after A.M. dose d) 1 hr after P.M. dose e) 2 hr after P.M. dose f) 3 hr after P.M. dose Dose: 50 mg. Mean concentrations significantly higher in absorption phase but not in elimination phase after A.M. dose Healthy, 22-31 yr olds, mean wt 64.6 +or- 2.2 kg. Japan GC
JAPAN; ADULTS; BLOOD SERUM; ANTIDEPRESSIVE AGENTS; DRUGS; COMPARATIVE EVALUATIONS; DELIBERATE EXPOSURE Nakano, S.; Hollister, L.E. 1983 Clinical Pharmacology and Therapeutics 33(4):453-459				

Tissue	Cases Exposure Route	Range	Mean	General Information
11605 Blood, whole	8 Injection Ingestion	a) 90-20 ng/ml b) 1.5-6.0 ng/ml c) 60-3.0 ng/ml d) 4.5-2.0 ng/ml e) 50-3.5 ng/ml f) 20-11 ng/ml g) 1.2-4 ng/ml h) 30-0 ng/ml i) 22-12 ng/ml j) 10-4 ng/ml k) 12-1.5 ng/ml	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given j) Not given k) Not given	a) Initially and 56 hr after 45 mg IV b) Nortriptylin, initially and 46 hr after 45 mg IV. Final level 5 ng/ml at 56 hr c) Initially and 54 hr after 20 mg IV d) 10-hydroxy amitriptylin, 4 and 12 hr after 20 mg IV. Initially 2.8 ng/ml e) Initially and 56 hr after 80 mg oral. f) Nortriptylin, initially and 46 hr after 80 mg oral. Final level 15 ng/ml g) 10-hydroxy nortriptylin, initially and 55 hr after 80 mg oral h) 4 and 57 hr after 40 mg oral. Initially 3.9 ng/ml i) 10-hydroxy nortriptylin, 5 and 57 hr after 40 mg oral. Initially 8 ng/ml j) Nortriptylin, 5 and 57 hr after 40 mg oral. Initially 3 ng/ml k) 10-hydroxy amitriptylin, 5 and 57 hr after 40 mg oral. Initially 5 ng/ml Estimated from graph Healthy 21-61 yr olds, wt 51-98 kg. HPLC
ADULTS; BEHAVIOR DISORDERS; BLOOD; ANTIDEPRESSIVE AGENTS; COMPARATIVE EVALUATIONS; DRUGS; DELIBERATE EXPOSURE Schulz, P.; Turner-Tamlyasu, K.; Smith, G.; Giacomini, K.M.; Blaschke, T.F. 1983 Clinical Pharmacology and Therapeutics 33(3):360-366				

6,10,14,18-Tetramethyl-5,9,13,17-nonadecatetraene-2-one (No postings in CHEMLINE).

Tissue	Cases Exposure Route	Range	Mean	General Information
11606 Blood, serum	4 Ingestion	a) 0-300 ng/ml b) 75-150 ng/ml c) 0-10 ng/ml	a) Not given b) Not given c) Not given	a) 1 and 4 hr after dose, given 30 min after breakfast. 285 ng/ml at 6 hr b) 2 and 4 hr after dose, given 30 min before breakfast. 150 ng/ml at 1 hr, 100 ng/ml at 6 hr c) 2 and 4 hr after dose, in fasting state. 0 and 6 hr Range of means. Crossover study, dose 100 mg. Values estimated from figure.
11607 Stomach	9	a) 0-796 ng/g b) 0-111 ng/g c) 0-874 ng/g d) 0-357 ng/g Wet wt	a) 149.1+/-89.5 ng/g b) 28.8+/-6.2 ng/g c) 251.2+/-138.6 ng/g d) 139+/-64 ng/g Wet wt	Ulcer patients GC; MS a) Mucosal layer, ulcer region b) Normal region, cranial and caudal to ulcer c) Muscular layer, ulcer region d) Normal region, cranial and caudal to ulcer 50 mg given 3X/d for 1-13 d. Final dose 1-2 d before surgery. GC; MS

BLOOD SERUM; STOMACH; DELIBERATE EXPOSURE; GASTROINTESTINAL DISEASES; DRUG THERAPY; DRUGS; COMPARATIVE EVALUATIONS

Nakazawa, S.; Tsuboi, Y.; Tsukamoto, Y.; Yoshino, J.; Okada, M. 1983 International Journal of Clinical Pharmacology, Therapy and Toxicology 21(6):267-270

6,14-Ethenomorphinan-7-methanol, 17-(cyclopropylmethyl)-alpha-(1,1-dimethylethyl)-4,5-epoxy-18,19-dihydro-3-hydro xy-6-methoxy-alpha-methyl-, (5alpha,7alpha(S))-

52485-79-7

C29-H41-N-O4

MW 467.71

Tissue	Cases Exposure Route	Range	Mean	General Information
11606 Urine	1 Injection Ingestion	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable i) Not applicable	a) 8.4% b) 5.0% c) 15.2% d) 6.5% e) 0.8% f) 7.0% g) 1.5% h) 3.4% i) 7.4%	a) Conjugated parent drug after 2 mg SC b) Free nor-metabolite c) Conjugated nor-metabolite d) Conjugated parent drug after 4 mg sublingual e) Free nor-metabolite f) Conjugated nor-metabolite g) Conjugated parent drug after 40 mg oral h) Free nor-metabolite i) Conjugated nor-metabolite Measurements at 96 hr after doses. Patient in Addiction Research Center, Baltimore, MD GC/MS

URINE; FECES; DELIBERATE EXPOSURE; ADULTS; ANALGESICS; NARCOTICS; DRUG ABUSE; DRUG THERAPY; DRUGS; BIOACCUMULATION; METABOLITES

Cone, E.J.; Gorodetzky, C.W.; Yousefnejad, D.; Buchwald, W.F.; Johnson, R.E. 1984 Drug Metabolism and Disposition 12(5):577-581

6aalpha-Aporphine, 1,2,9,10-tetramethoxy- (8 CI); 4H-Dibenzo(de,g)quinoline, 5,6,6a,7-tetrahydro-1,2,9,10-tetramethoxy-6-methyl-, (S)- (9 CI)
475-81-0
C21-H25-N-O4
MW 355.42, MP 120 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11609 Blood, plasma	5 Ingestion	63-2 ng/ml	Not applicable	0-72 hr, peak (267 ng/ml) at 4 hr following dose of 60 mg. New assay. Healthy volunteers HPLC
11610 Urine	5 Ingestion	a) 53.2-140.8 ug b) 6.7-16.9 ug c) 0-2.2 ug	a) 70.67 ug b) 11.2 ug c) 0.8 ug	a) Total excretion 0-8 hr b) Total excretion 8-24 hr c) Total excretion 24-48 hr Dose of 60 mg. New assay. Healthy volunteers HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; FRANCE; ALKALOIDS; BIOLOGICAL MONITORING; DRUGS Fele, J.-P.; Lechat, P.; Rispe, R.; Cautreels. W. 1984 Journal of Chromatography 308:273-281				

6H-Dibens(b,f)oxireno(d)azepine-6-carboxamide, 1a,10b-dihydro-
36507-30-9
C15-H12-N2-O2
MW 252.29

Tissue	Cases Exposure Route	Range	Mean	General Information
11611 Blood, plasma	4 Ingestion	a) 4.2-5.0 umol/l b) 5.6-7.5 umol/l c) 14.3-16.5 umol/l	a) Not given b) Not given c) Not given	a) 50 mg b) 100 mg c) 200 mg Peaks, 1.5-2.0 hr after dose Healthy subjects HPLC
11612 Urine	4	a) 0.7-0.05 umol/hr b) 4-0.18 umol/hr c) 10-0.07 umol/hr d) 20-0.1 umol/hr	a) Not given b) Not given c) Not given d) Not given	a) Trans-CBZ-diol metabolite 30 and 80 hr after 10 mg carbamazepine-10,11-epoxide, 1 subject b) After 50 mg, 2 subjects c) After 100 mg, 3 subjects d) After 200 mg, 2 subjects Estimated from graph Healthy subjects Mass fragmentography
ADULTS; BLOOD PLASMA; URINE; ANTICONVULSANTS; DELIBERATE EXPOSURE; METABOLISM; DRUGS Tomson, T.; Tybring, G.; Bertilsson, L. 1983 Clinical Pharmacology and Therapeutics 33(1):58-65				

6H-Dibenzo(b,d)pyran-1-ol, 6a,7,8,10a-tetrahydro-6,6-9-trimethyl-3-pentyl-, (6aR-trans)-
1972-08-3
C21-H30-O2
MW 314.45

Tissue	Cases Exposure Route	Range	Mean	General Information
11613 Blood	252 Inhalation	5.5-23 ng/ml	Not applicable	Range of levels defined as positive. 81% of drivers had levels between 5.5-10 ng/ml. Peak (51 drivers) was 8 ng/ml. Dosage unknown. Drivers submitting to blood alcohol testing, having been arrested for impaired driving RIA; GC/MS
BLOOD; CONSUMER EXPOSURE; ADULTS; DRUG ABUSE; DRUGS; PSYCHOTROPIC DRUGS; FORENSIC MEDICINE; ALCOHOLIC BEVERAGES; BIOACCUMULATION; BIOINDICATORS; INHALATION; METABOLITES; SMOKING; HEALTH HAZARDS				
Zimmerman, E.G.; Yeager, E.P.; Soares, J.R.; Hollister, L.E.; Reeve, V.C. 1983 Journal of Forensic Sciences 28(4):957-962				

Tissue	Cases Exposure Route	Range	Mean	General Information
11614 Blood	47	a) 3.1-37 ug/L b) 0-157 ug/L	a) 8.70+/-8.25 ug/L b) 39.8+/-38 ug/L	a) Drivers involved in single-car accidents, killed in crash or lived <1 hr and received no vigorous medical treatment, 47 cases b) Metabolite, 9-carboxy-tetrahydrocannabinol, 44 of a) Blood alcohol >0.2 g/L (mean 1.60+/-0.8 g/L) in 41 of 47 cases. Additional data in article. 26.5+/-11.7 yr olds, vehicle fatalities, 1978-1981, NC RIA
BLOOD; NORTH CAROLINA; AUTOPSIES; DRUGS; DRUG ABUSE; DRUG INTERACTION; PSYCHOTROPIC DRUGS; SEDATIVES; HYPNOTICS; ANTICONVULSANTS; FORENSIC MEDICINE; ALCOHOLS; DELIBERATE EXPOSURE				
Mason, A.P.; McBay, A.J. 1984 Journal of Forensic Sciences 29(4):987-1026				

Tissue	Cases Exposure Route	Range	Mean	General Information
11615 Blood, plasma	1 Inhalation Injection	a) 1.77-2.2 ng/ml b) 1.74-2.18 ng/ml	a) Not given b) Not given	a) Plateau, 20-60 min after passive inhalation of smoke of 4 marihuana cigarettes in enclosed area b) Plateau, 12-60 min after start of 3.2 ug/min IV 1 hr infusion Young, healthy adult, normal, never used maribuana. RIA
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; PSYCHOTROPIC DRUGS				
Peres-Reyes, M.; Di Guiseppi, S.; Mason, A.P.; Davis, K.H. 1983 Clinical Pharmacology and Therapeutics 34(1):36-41				

Tissue	Cases Exposure Route	Range	Mean	General Information
11616 Blood, plasma	6 Inhalation	45-5 ng/ml	Not applicable	0-240 min, peak (140 ng/ml) at 5 min after smoking 2.5% dose cigarette. Peak proportional to % dose. Subjective "highs" reported by subjects lag behind levels, but are directly proportional to them.
BLOOD PLASMA; DELIBERATE EXPOSURE; ADULTS; DRUG ABUSE; DRUGS; PSYCHOTROPIC DRUGS; BIOACCUMULATION; SMOKING; INHALATION				
Chiang, C.N.; Barnett, G. 1984 Clinical Pharmacology and Therapeutics 36(2):234-238				

6H-Dibenso(b,d)pyran-1-ol, 6a,7,8,10a-tetrahydro-6,6-9-trimethyl-3-pentyl-, (6aR-trans)-
1972-08-3
C21-H30-O2
MW 314.45

Tissue	Cases Exposure Route	Range	Mean	General Information
11617 Blood, plasma	4 Ingestion	0-0.1+/-0.01 ng/ml	Not applicable	0-72 hr, peak (6.9+/-1.4 ng/ml) at 4 hr. Initial dose 20 mg delta-9-THC in cannabis resin. Volunteers, 27-34 yr, good health and no previous experience with cannabis HPLC; RIA
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; UNITED KINGDOM; ADULTS; DRUG ABUSE; DRUGS; PSYCHOTROPIC DRUGS; FORENSIC MEDICINE; ALKALOIDS; VOLATILE ORGANIC COMPOUNDS; BIOACCUMULATION; BIOLOGICAL MONITORING; METABOLITES Law, B.; Mason, P.A.; Moffat, A.C.; Gleadle, R.I.; King, L.J. 1984 Journal of Pharmacy and Pharmacology 36:289-294				

Tissue	Cases Exposure Route	Range	Mean	General Information
11618 Blood, plasma	12 Injection Ingestion	a) 62+/-18-3.2 ng/ml b) 62+/-18-11+/-3.3 ng/ml c) Trace-1.8+/-1.4 ng/ml d) 0.6+/-0.3-4.8+/-1.5 ng/ml e) 0.7+/-0.4-Trace ng/ml f) 58+/-17-2.3+/-1.1 ng/ml g) 28+/-26-35+/-11 ng/ml h) 4.1+/-3.9-12+/-7.4 ng/ml i) 4.8+/-4.6-0.9+/-0.5 ng/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable g) Not applicable h) Not applicable i) Not applicable	a) Total cannabinoids, peak (107+/-40 ng/ml) 0.25 hr after 2.2 mg IV b) Nonconjugated cannabinoids, peak (106+/-40 ng/ml) 0.25 hr after 2.2 mg IV c) Polar acids, peak (16+/-3.1 ng/ml) 0.33 hr after 2.2 mg IV d) 11-Nor-acid, peak (24+/-10 ng/ml) 1.0 hr after 2.2 mg IV e) 11-OH-Alpha-9-THC, peak (3.8+/-2.8 ng/ml) 0.33 hr after 2.2 mg IV f) Parent, peak (85+/-26 ng/ml) 0.17 hr after 2.2 mg IV g) Total cannabinoids, peak (207+/-40 ng/ml) 2.0 hr after 15 mg oral h) 11-Nor-acid, peak (68+/-20 ng/ml) 2.0 hr after 15 mg oral i) Parent, peak (9.4+/-4.5 ng/ml) 1.75 hr after 15 mg oral Females, 5 min-48 hr, data for males similar. Other oral dose metabolite data given. Healthy volunteers, 6 males, 6 females, college students TLC
BLOOD PLASMA; URINE; FECES; DELIBERATE EXPOSURE; ADULTS; ANTICONVULSANTS; DRUG ABUSE; DRUG THERAPY; DRUGS; PSYCHOTROPIC DRUGS; BIOACCUMULATION; METABOLISM; METABOLITES; RADIONUCLIDES Wall, M.E.; Sadler, B.M.; Brine, D.; Taylor, H.; Peres-Reyes, M. 1983 Clinical Pharmacology and Therapeutics 34(3):352-363				

Tissue	Cases Exposure Route	Range	Mean	General Information
11619 Blood, plasma	1 Inhalation Injection	a) 2.0-2.2 ng/mL b) 0.5-0.5 ng/mL c) 2.0-2.2 ng/mL	a) Not applicable b) Not applicable c) Not applicable	a) Passive inhalation for 1 hr in room with 4 active smokers. Steady state 20-40 min. 1.8 mg/mL at 60 min b) Metabolite, 9-carboxy-THC, 9-60 min. Peak 2.1 mg/mL at 20 min c) Infusion of 3.2 ug/min for 1 hr. Steady state, 10-60 min. Belows limits of detection (0.1 mg/mL) by 75 min. Mean level in air (a), b)) was 620 ug/cu m. Healthy volunteer RIA; GC/MS
BLOOD PLASMA; DELIBERATE EXPOSURE; DRUGS; MEASUREMENT METHODS; METABOLITES; INHALATION; SMOKING; DRUG ABUSE Mason, A.P.; Peres-Reyes, M.; McBay, A.J.; Foltz, R.L. 1983 Journal of Analytical Toxicology 7:172-174				

6H-Dibenzo(b,d)pyran-1-ol, 6a,7,8,10a-tetrahydro-6,6-9-trimethyl-3-pentyl-, (6aR-trans)-
1972-08-3
C21-H30-O2
MW 314.46

Tissue	Cases Exposure Route	Range	Mean	General Information
11620 Blood, serum	11	13-141 ng/mL	Not given	Range is for total delta-9-THC metabolites. Separate concentrations also given for delta-9-THC-11-oic acid glucuronide, delta-9-THC-11-oic acid, and delta-9-THC. Persons suspected of having used cannabis HPLC/RIA

BLOOD; BLOOD PLASMA; BLOOD SERUM; URINE; ADOLESCENTS; DRUG ABUSE; PSYCHOTROPIC DRUGS; MEASUREMENT METHODS; FORENSIC MEDICINE; DELIBERATE EXPOSURE; DRUGS

Law, B.; Mason, P.A.; Moffat, A.C.; King, L.J. 1984 Journal of Analytical Toxicology 8:19-22

Tissue	Cases Exposure Route	Range	Mean	General Information
11621 Blood, serum	a) 15 b) 25 c) 18 d) 22 e) 36 Inhalation	a) 6.5-8.9 ng/ml b) 8.2-5.3 ng/ml c) 0.6-1.7 ng/ml d) 3.5-6.7 ng/ml e) 2.4-3.3 ng/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable	a) Heavy marihuana users, 0-150 min, peak (84.1 ng/ml) at 5 min b) Medium users, 0-150 min, peak (61.2 ng/ml) at 5 min c) Light users, 0-150 min, peak (46.7 ng/ml) at 5 min d) Smoked >1 cigarette, 0-150 min, peak (79.1 ng/ml) at 5 min e) Smoked 1 cigarette, 0-150 min, peak (55.9 ng/ml) at 5 min. Healthy 21-52 yr old volunteers RIA

BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; BEHAVIOR DISORDERS; DRUG ABUSE; DRUGS; PSYCHOTROPIC DRUGS; FORENSIC MEDICINE; BIOACCUMULATION; BIOINDICATORS; SMOKING; INHALATION

Reeve, V.C.; Robertson, W.B.; Grant, J.; Soares, J.R.; Zimmermann, E.G.; Gillespie, H.K.; Hollister, L.E. 1983 Journal of Forensic Sciences 28(4):963-971

Tissue	Cases Exposure Route	Range	Mean	General Information
11622 Urine	4 Inhalation	0.1-4.2 ng/ml	Not applicable	0-6 hr, peak (4.7 ng/ml) at 4.5 hr. Non-smokers exposed 3 hr to cannabis smoke. Healthy adult volunteers RIA

URINE; DELIBERATE EXPOSURE; UNITED KINGDOM; ADULTS; DRUG ABUSE; DRUGS; PSYCHOTROPIC DRUGS; FORENSIC MEDICINE; ALKALOIDS; VOLATILE ORGANIC COMPOUNDS; AIR POLLUTION; BIOACCUMULATION; INHALATION; METABOLITES; POPULATION EXPOSURE; SMOKING

Law, B.; Mason, P.A.; Moffat, A.C.; King, L.J.; Marks, V. 1984 Journal of Pharmacy and Pharmacology 36:578-81

6H-Dibenso(b,d)pyran-1-ol, 6a,7,8,10a-tetrahydro-6,6-9-trimethyl-3-pentyl-, (6aR-trans)-
1972-08-3
C21-H30-O2
MW 314.46

Tissue	Cases Exposure Route	Range	Mean	General Information
11628 Urine	20	3.3-1780 ng/ml	Not given	Range is for total delta-9-THC metabolites. Separate concentrations for polar metabolites, delta-9-THC-11-oic acid glucuronide, delta-9-THC-11-oic acid also given. Persons suspected of having used cannabis HPLC/RIA

BLOOD; BLOOD PLASMA; BLOOD SERUM; URINE; ADOLESCENTS; DRUG ABUSE; PSYCHOTROPIC DRUGS; MEASUREMENT METHODS; FORENSIC MEDICINE; DELIBERATE EXPOSURE; DRUGS
Law, B.; Mason, P.A.; Moffat, A.C.; King, L.J. 1984 Journal of Analytical Toxicology 8:19-22

Tissue	Cases Exposure Route	Range	Mean	General Information
11624 Urine	12 Injection Ingestion	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given g) Not given h) Not given i) Not given	a) 16+/-3% b) 15+/-4% c) 10+/-3% d) 9.5+/-2.8% e) 5.5+/-1.5% f) 6.0+/-1.7% g) 15.9+/-3.6% h) 8.1+/-1.0% i) 7.8+/-3.4%	a) Total cannobinoids, female, IV b) Total cannabinoids, male, I.V. c) Nonconjugated cannabinoids, female, IV d) Nonconjugated, male, IV e) Conjugated, female, IV f) Conjugated, male, IV g) Total, female, oral h) Nonconjugated, female, oral i) Conjugated, female, oral % dose excreted in 72 hrs. IV dose was 2.2 mg for female, 4 mg for male. Oral dose was 15 mg for female, 20 mg for male. Oral dose data similar in both sexes. Healthy volunteers, 6 males, 6 females, college students TLC

BLOOD PLASMA; URINE; FECES; DELIBERATE EXPOSURE; ADULTS; ANTICONVULSANTS; DRUG ABUSE; DRUG THERAPY; DRUGS; PSYCHOTROPIC DRUGS; BIOACCUMULATION; METABOLISM; METABOLITES; RADIONUCLIDES
Wall, M.E.; Sadler, B.M.; Brine, D.; Taylor, H.; Perez-Reyes, M. 1983 Clinical Pharmacology and Therapeutics 34(3):352-363

Tissue	Cases Exposure Route	Range	Mean	General Information
11626 Urine	20	a) 38->100 equiv ng/ml b) 26->100 equiv ng/ml c) 13-178 ng/ml d) 15-180 ng/ml e) 6-173 ng/ml f) 11-232 ng/ml	a) Not given b) Not given c) Not given d) Not given e) Not given f) Not given	a) By RIA b) EMIT c) HPLC d) GC-EC e) GC-EC, repeated after 2 mo storage at -18 deg C f) GC/MS, after 2 mo storage Major metabolite, 11-nor-delta9-THC-9-COOH, measured. Significant correlations between results of HPLC, GC-EC, and GC/MS procedures. Samples, Naval Drug Screening Laboratory, Naval Air Station, Norfolk, VA RIA; EMIT; HPLC; GC-EC; GC/MS

URINE; DELIBERATE EXPOSURE; DRUG ABUSE; DRUGS; PSYCHOTROPIC DRUGS; COMPARATIVE EVALUATIONS; FORENSIC MEDICINE; MEASUREMENT METHODS; METABOLITES
Jones, A.B.; ElSohly, H.N.; Arafat, E.S.; ElSohly, M.A. 1984 Journal of Analytical Toxicology 8:249-251

6H-Dibenso(b,d)pyran-9-carboxylic acid, 6a,7,8,10a-tetrahydro-1-hydroxy-6,6-dimethyl-3-pentyl-
64380-14-4
C21-H26-O4

Tissue	Cases Exposure Route	Range	Mean	General Information
11626 Blood, plasma	Ingestion	0-3.3+/-0.9 ng/ml	Not applicable	0-72 hr, peak (38+/-10 ng/ml) at 4 hr. Initial dose 20 mg delta-9-THC in cannabis resin. Volunteers, 27-34 yr, good health and no previous experience with cannabis HPLC; RIA
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; UNITED KINGDOM; ADULTS; DRUG ABUSE; DRUGS; PSYCHOTROPIC DRUGS; FORENSIC MEDICINE; ALKALOIDS; VOLATILE ORGANIC COMPOUNDS; BIOACCUMULATION; BIOLOGICAL MONITORING; METABOLITES Law, B.; Mason, P.A.; Moffat, A.C.; Gleadle, R.I.; King, L.J. 1984 Journal of Pharmacy and Pharmacology 36:289-294				

6H-Purin-6-one, 2-amino-1,9-dihydro-9-((2-hydroxyethoxy)methyl)-
82277-80-2
C8-H11-N5-O3
MW 225.24

Tissue	Cases Exposure Route	Range	Mean	General Information
11627 Blister fluid				Review. Survey of analytical procedures, routes of administration, dosage and distribution.
11628 Blood, cells				Review. Survey of analytical procedures, routes of administration, dosage and distribution.
11629 Blood, plasma				Review. Survey of analytical procedures, routes of administration, dosage and distribution.
11630 Brain				Review. Survey of analytical procedures, routes of administration, dosage and distribution.
11631 Cerebrospinal fluid				Review. Survey of analytical procedures, routes of administration, dosage and distribution.
11632 Heart				Review. Survey of analytical procedures, routes of administration, dosage and distribution.
11633 Kidney				Review. Survey of analytical procedures, routes of administration, dosage and distribution.
11634 Liver				Review. Survey of analytical procedures, routes of administration, dosage and distribution.
11635 Lung				Review. Survey of analytical procedures, routes of administration, dosage and distribution.
11636 Saliva				Review. Survey of analytical procedures, routes of administration, dosage and distribution.
11637 Spinal cord				Review. Survey of analytical procedures, routes of administration, dosage and distribution.

(next page)

6H-Purin-6-one, 2-amino-1,9-dihydro-9-((2-hydroxyethoxy)methyl)-
59277-89-3
C8-H11-N5-O3
MW 225.24

(continued)

Tissue	Cases Exposure Route	Range	Mean	General Information
11638 Urine				Review. Survey of analytical procedures, routes of administration, dosage and distribution.
11639 Vaginal secretion				Review. Survey of analytical procedures, routes of administration, dosage and distribution.
BLOOD PLASMA; URINE; CEREBROSPINAL FLUID; KIDNEYS; BRAIN; SPINAL CORD; LUNGS; HEART; LIVER; SALIVA; BLISTER FLUID; VAGINAL SECRETION; BLOOD; DELIBERATE EXPOSURE; INFECTION; VENEREAL DISEASES; DRUG THERAPY; DRUGS; REVIEW; METABOLISM Laskin, O.L. 1984 Clinical Pharmacokinetics 8:187-201				

7-N-(p-Hydroxyphenyl)mitomycin C (No postings in CHEMLINE).

Tissue	Cases Exposure Route	Range	Mean	General Information
11640 Blood, serum	1 Injection	7.5-0.009 nmol/ml	Not applicable	1 min and 5 hr after 20 mg/kg. Estimated from graph. New measurement method. 65 yr old cholangiocarcinoma patient Enzyme immunoassay
BLOOD SERUM; DELIBERATE EXPOSURE; DRUGS; ANTITUMOR AGENTS; CHEMOTHERAPY; NEOPLASMS Fujiwara, K.; Nakamura, H.; Kitagawa, T.; Nakamura, N.; Saito, A.; Hara, K. 1984 Cancer Research 44:4172-4176				

7H-Furo(3,2-g)(1)benzopyran-7-one, 9-methoxy-
298-81-7
C12-H8-O4
MW 216.18, MP 148 C

Tissue	Cases Exposure Route	Range	Mean	General Information
11641 Blister fluid	a) 17 b) 16 Ingestion	a) 14-118 ng/ml b) 9-95 ng/ml	a) 49 ng/ml b) 49 ng/ml	a) At 2-5 hr b) At 2 hr After 0.6+/-0.06 mg/kg oral on third test day. Patients with psoriasis undergoing this treatment for the first time HPLC
11642 Blood, serum	a) 18 Ingestion	155+/-97-176+/-99 ng/ml	Not applicable	Range of peaks on 4 test days, after 0.6+/-0.06 mg/kg. Patients with psoriasis undergoing this treatment for the first time HPLC
BLOOD SERUM; BLISTER FLUID; DELIBERATE EXPOSURE; NETHERLANDS; ADULTS; SKIN DISEASES; DRUG THERAPY; DRUGS; BIOACCUMULATION; ULTRAVIOLET RADIATION Herfst, M.J.; De Wolff, F.A. 1983 Clinical Pharmacology and Therapeutics 34(1):117-124				

9-beta-D-Arabinofuranosyl-2-fluoroadenine monophosphate (No postings in CHEMLINE).

Tissue	Cases Exposure Route	Range	Mean	General Information
11648 Blood, plasma	1 Injection	a) 0.7-0.17 ug/ml b) 0.85-0.105 ug/ml c) Not given-0.08 ug/ml	a) Not given b) Not given c) Not given	a) 0-4 hr after 1st dose b) 0-12 hr after 5th dose c) 0-24 hr after 2nd dose 18 mg/sq m/day IV. Times at end of infusions. Representative data from 18 cases. Dose 5 consecutive days, 4-week intervals. Cancer patient Somnolence, nausea, vomiting, metallic taste, chest pain, pruritus, elevated glutamicoxaloacetic transaminase, night sweats Granulocytopenia, thrombocytopenia, peripheral lymphopenia HPLC
BLOOD PLASMA; DELIBERATE EXPOSURE; DRUGS; ANTITUMOR AGENTS; CHEMOTHERAPY; NEOPLASMS Hutton, J.J.; Von Hoff, D.D.; Kuhn, J.; Phillips, J.; Hersh, M.; Clark, G. 1984 Cancer Research 44:4183-4186				

9,10-Anthracenedicarboxaldehyde, bis((4,5-dihydro-1H-imidasol-2-yl)hydrasone)
78186-84-2
C22-H22-N8

Tissue	Cases Exposure Route	Range	Mean	General Information
11644 Blood, plasma	5 Injection	5-0.1 ug/ml	Not applicable	0-24 hr, rapid decline from 5-0.2 ug/ml in 8 hr, moderate decline thereafter, after 260 mg/sq m infusion. Patients with colorectal or bladder cancer, 3 females, 2 males Phlebitis, thromboses, local toxicity HPLC
11645 Urine	5 Injection	7.7-16.8%	11.3+/-1.8%	% dose recovered in 24 hr after 260 mg/sq m infusion. Patients with colorectal or bladder cancer, 3 females, 2 males Phlebitis, thromboses, local toxicity HPLC
BLOOD PLASMA; URINE; DELIBERATE EXPOSURE; ADULTS; CARCINOMAS; GASTROINTESTINAL DISEASES; ANTITUMOR AGENTS; DRUG THERAPY; DRUGS; BIOACCUMULATION; NEOPLASMS Powis, G.; Kovach, J.S. 1983 Cancer Research 43:925-929				

9,10-Ethanoanthracene-9(10H)-ethanol, alpha-((methylamino)methyl)-, hydrochloride
58022-89-4
C20-H23-N-O.Cl-H

Tissue	Cases Exposure Route	Range	Mean	General Information
11646 Blood	2 Ingestion	a) 140-30 ng equiv/ml b) 0-0 ng equiv/ml c) 80-0 ng equiv/ml d) 0-30 ng equiv/ml e) 0 ng equiv/ml f) 0 ng equiv/ml	a) Not applicable b) Not applicable c) Not applicable d) Not applicable e) Not applicable f) Not applicable	a) Total radioactivity, 1-95 hrs, peak (590 ng equiv/ml) at 3 hr, subject 1 b) Unchanged form, no hydrolysis, 1-95 hr, peak (16 ng equiv/ml) at 6 hr, subject 1 c) Unchanged form after hydrolysis, 1-95 hr, peak (207 ng equiv/ml) at 2 hr, subject 1 d) Same as a), peak (207 ng equiv/ml) at 6 hr, subject 2 e) Same as b), peak (19 ng equiv/ml) at 9 hr, subject 2 f) Same as c), peak (167 ng equiv/ml) at 9 hr, subject 2 50 mg dose, desmethyl metabolite levels minor, bound by human serum proteins. Healthy volunteers Scintillation counting
11647 Urine	2 Ingestion	a) 60.7-1.6% b) 51.6-4.0%	a) Not applicable b) Not applicable	a) 1-11 d, % dose excreted, total excretion 84% of 50 mg dose, subject 1 b) 1-11 d, % dose excreted, total excretion 90% of 50 mg dose, subject 2. Healthy volunteers Scintillation counting
BLOOD; URINE; FECES; DELIBERATE EXPOSURE; SWITZERLAND; ADULTS; BEHAVIOR DISORDERS; DEPRESSION; ANTIDEPRESSIVE AGENTS; DRUG THERAPY; BIOACCUMULATION; RADIOISOTOPES; METABOLISM; METABOLITES; DRUGS Dieterle, W.; Feigle, J.W.; Imhof, P.; Sulc, M.; Wagner, J. 1984 Xenobiotica 14(4):303-310				

9,10-Secocholesta-5,7,10(19)-triene-1,3,25-triol, (1alpha,3beta,5Z,7E)-
32222-06-3
C27-H44-O3
MW 416.65

Tissue	Cases Exposure Route	Range	Mean	General Information
11648 Blood, serum	2	a) Not given b) Not given	a) 27 pg/ml b) 22 pg/ml	a) Mother, at delivery b) Umbilical cord During pregnancy and lactation took 1 g Ca, vitamin and mineral supplement (400 IU vitamin D, 350 mg Ca) and 100,000 IU vitamin D2/d. Normal winter maternal levels 60.5 pg/ml Healthy infant. Her 27 yr old mother with familial multiple endocrine adenomatosis (10 yr duration) Ligand binding
BLOOD SERUM; MILK; DELIBERATE EXPOSURE; ADULTS; INFANTS; CALCIUM; MAGNESIUM, VITAMIN D; LACTATION; METABOLITES; DRUGS Greer, F.R.; Hollis, B.W.; Napoli, J.L. 1984 Journal of Pediatrics 105(1):61-64				

9,10-Secocholesta-5,7,10(19)-triene-1,3,25-triol, (1alpha,3beta,5Z,7E)-
82222-06-3
C27-H44-O3
MW 416.65

Tissue	Cases Exposure Route	Range	Mean	General Information
11640 Blood, serum	1 Ingestion	Not applicable	61.6 pg/ml	100 ug/d of 25-OHD. Mianserin therapy stopped and when restarted levels fell below detectable limits. When therapy stopped again, levels returned to normal. 51 yr old on mianserin (10 mg/d every 2-3 mo) since 1976 RIA
BLOOD SERUM; DELIBERATE EXPOSURE; ADULTS; VITAMIN D; DRUGS Phelan, P.D. 1984 Lancet I(8383):958-959				

Tissue	Cases Exposure Route	Range	Mean	General Information
11650 Milk				Review of levels of vitamin D and metabolites measured in human breast milk by various methods.
MILK; VITAMIN D; METABOLITES; REVIEW; MEASUREMENT METHODS; LACTATION; NUTRITIONAL DEFICIENCIES; DIETS; DRUGS Makin, H.L.J.; Seamark, D.A.; Trafford, D.J.H. 1983 Archives of Disease in Childhood 58(9):750-753				

9,10-Secocholesta-5,7,10(19)-triene-3,24,25-triol, (3beta,5Z,7E)-
40018-67-4
C27-H44-O3

Tissue	Cases Exposure Route	Range	Mean	General Information
11651 Milk				Review of levels of vitamin D and metabolites measured in human breast milk by various methods.
MILK; VITAMIN D; METABOLITES; REVIEW; MEASUREMENT METHODS; LACTATION; NUTRITIONAL DEFICIENCIES; DIETS; DRUGS Makin, H.L.J.; Seamark, D.A.; Trafford, D.J.H. 1983 Archives of Disease in Childhood 58(9):750-753				

9,10-Secocholesta-5,7,10(19)-triene-3beta,25-diol (8 CI); 9,10-Secocholesta-5,7,10(19)-triene-3,25-diol, (3beta,5Z,7E)- (9 CI)
19356-17-8
C27-H44-O2
MW 400.65

Tissue	Cases Exposure Route	Range	Mean	General Information
11652 Blood, serum	2	a) Not given b) Not given	a) 4.9 ng/ml b) 2.0 ng/ml	a) Mother, at delivery b) Umbilical cord During pregnancy and lactation took 1 g Ca, vitamin and mineral supplement (400 IU vitamin D, 350 mg Ca) and 100,000 IU vitamin D2/d. Normal winter maternal levels 11.8+/-5.3 ng/ml. Healthy infant. Her 27 yr old mother with familial multiple endocrine adenomatosis (10 yr duration) Ligand binding
11653 Milk	1 Ingestion	a) Not given b) Not given	a) <0.01 ng/ml b) <0.01 ng/ml	a) 14 d lactation, competitive binding assay b) 14 d lactation, UV Mother took 1 gm Ca, vitamin/mineral supplement (400 IU vitamin D, 350 mgCa), and 100,000 IU vitamin D/d. Normal winter levels 0.29+/-0.12 ng/ml. Estimated total vitamin D in milk 7000 IU/L (normal <20 IU/L). Breast-fed for 25 d. Infant intake 4500 IU/d, no symptoms of vitamin D toxicity but Ca levels elevated 27 yr old mother with familial multiple endocrine adenomatosis (10 yr duration) Competitive binding assay; UV

BLOOD SERUM; MILK; DELIBERATE EXPOSURE; ADULTS; INFANTS; CALCIUM; MAGNESIUM; VITAMIN D; LACTATION; METABOLITES; DRUGS
Greer, F.R.; Hollis, B.W.; Napoli, J.L. 1984 Journal of Pediatrics 105(1):61-64

Tissue	Cases Exposure Route	Range	Mean	General Information
11654 Milk				Review of levels of vitamin D and metabolites measured in human breast milk by various methods.

MILK; VITAMIN D; METABOLITES; REVIEW; MEASUREMENT METHODS; LACTATION; NUTRITIONAL DEFICIENCIES; DIETS; DRUGS
Makin, H.L.J.; Seamark, D.A.; Trafford, D.J.H. 1983 Archives of Disease in Childhood 58(9):750-753

9,10-Secocholesta-5,7,10(19)-triene-3beta,25,26-triol (8 CI); 9,10-Secocholesta-5,7,10(19)-triene-3,25,26-triol, (3beta,5Z,7E)- (9 CI)
20261-12-9
C27-H44-O3

Tissue	Cases Exposure Route	Range	Mean	General Information
11655 Milk				Review of levels of vitamin D and metabolites measured in human breast milk by various methods.

MILK; VITAMIN D; METABOLITES; REVIEW; MEASUREMENT METHODS; LACTATION; NUTRITIONAL DEFICIENCIES; DIETS; DRUGS
Makin, H.L.J.; Seamark, D.A.; Trafford, D.J.H. 1983 Archives of Disease in Childhood 58(9):750-753

9,10-Secoergosta-5,7,10(19),22-tetraene-3beta,25-diol (8 CI); 9,10-Secoergosta-5,7,10(19),22-tetraene-3,25-diol, (3beta,5Z,7E,22E)- (9 CI)
21343-40-8
C28-H44-O2

Tissue	Cases Exposure Route	Range	Mean	General Information
11656 Blood, serum	2	a) Not given b) Not given	a) 545 ng/ml b) 251 ng/ml	a) Mother, at delivery b) Umbilical cord During pregnancy and lactation took 1 g Ca, vitamin and mineral supplement (400 IU vitamin D, 350 mg Ca) and 100,000 IU vitamin D2/d. Normal winter maternal levels 15.6+/-5.1 ng/ml. Healthy infant. Her 27 yr old mother with familial multiple endocrine adenomatosis (10 yr duration) Ligand binding
11657 Milk	1 Ingestion	a) Not given b) Not given	a) 8.3 ng/ml b) 7.3 ng/ml	a) 14 d lactation, competitive binding assay b) 14 d lactation, UV Mother took 1 gm Ca, vitamin/mineral supplement (400 IU vitamin D, 350 mgCa), and 100,000 IU vitamin D/d. Normal winter levels 0.1+/-0.07 ng/ml. Estimated total vitamin D in milk 7000 IU/L (normal <20 IU/L). Breast-fed for 28 d. Infant intake 4500 IU/d, no symptoms of vitamin D toxicity but Ca levels elevated 27 yr old mother with familial multiple endocrine adenomatosis (10 yr duration) Competitive binding assay; UV

BLOOD SERUM; MILK; DELIBERATE EXPOSURE; ADULTS; INFANTS; CALCIUM; MAGNESIUM; VITAMIN D; LACTATION; METABOLITES; DRUGS

Greer, F.R.; Hollis, B.W.; Napoli, J.L. 1984 Journal of Pediatrics 105(1):61-64

50272-101

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15. Supplementary Notes

16. Abstract (Limit: 200 words)

The database provides a central source of systematically collected and organized body-burden data that facilitates the early identification of actual or potential human exposure to environmental contaminants and the assessment of the significance of such exposure. Data included are obtained through routine manual searches of selected scientific journals, augmented by computer searches.

The database, which includes the separately published files, Chemicals Identified in Human Biological Media and Chemicals Identified in Feral and Food Animals, contains information on more than 1600 chemicals. The database is used in exposure, hazard and risk assessment; identifying potential human and environmental health problems including sources of contamination; planning research and comparing results; and in teaching at medical and public health schools.

The database is under the aegis of the Interagency Collaborative Group on Environmental Carcinogenesis, National Cancer Institute (NCI) and is maintained by the Health and Environmental Information Section, Science Applications International Corporation under the direction of the Exposure Evaluation Division, U.S. Environmental Protection Agency (EPA). Funding is provided through interagency agreements involving NCI, EPA, and the U.S. Department of Energy.

17. Document Analysis a. Descriptors

Body burden
Human tissues/body fluids
Residues

b. Identifiers/Open-Ended Terms

c. COSATI Field/Group

18. Availability Statement	19. Security Class (This Report)	21. No. of Pages
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	20. Security Class (This Page) Unclassified	22. Price

(See ANSI-Z39.18) See Instructions on Reverse

OPTIONAL FORM 272 (4-77)
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